EMERGING PARADIGMS IN HIGHER EDUCATION

Entrepreneurship

Teaching & Learning

Capacity Building

Sustainability

Infrastructure & ICT

Extension & Outreach

Student Progressin

Research & Innovation

PROF. SUDHA KATYAL
(CHIEF EDITOR)

DR. RUPINDER KAUR GHUMMAN
(SUB EDITOR)

DR. RITU PRADHAN
(SUB EDITOR)

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FOREWORD

ARUN KUMAR GUPTA, IAS

FOREWORD

Government Home Science College is striving on the path of excellence with the various academic initiatives taken in the field of higher education. Another feather in the cap is publishing an edited book "Emerging Paradigms in Higher Education". Truly, there is a remarkable achievement in the arena of higher education in the past seven years since the inception of Rashtriya Uchchatar Shiksha Abhiyan under MHRD, Govt. of India which aims at transforming quality and branding in higher education in India.

The institution has always been actively involved in developing a system for conscious, consistent and catalytic improvement in the academic environment. Considering that India is expected to have a significant (34.33%) share of youth in the total population of India by 2020, an integrated approach is crucial not only in enhancing abilities, skills and potential of youth but also to prepare them to be productive, self-sufficient, economically independent and responsible citizens of the country.

I would like to congratulate the Chief Editor Prof. Sudha Katyal and the sub-editors Dr. Rupinder Kaur Ghumman and Dr. Ritu Pradhan for their endeavour in this direction. I hope the readers will enjoy reading this book.

(Arun Kumar Gupta)
Principal Secretary Education-cum-
Principal Secretary Home,
Chandigarh Administration.

PREFACE

The world has advanced considerably throughout the decades and the need for higher education has been on the rise. The Government lays special focus on imparting employment-oriented education; motivate students to be socially aware and responsible citizens, to inculcate a spirit of dignity of labor among the youth and commitment for social upliftment. The need of the hour is to ensure quality education and its enhancement from time to time.

The National Assessment and Accreditation Council (NAAC) is a body working with the sole purpose of ensuring good quality education and maintaining standards. NAAC aims to facilitate the quality promotion, sustenance, and enhancement amongst all institutions of higher education. Higher education equips a man with the specialized skills required to earn higher levels of efficiency at the workplace, gives an equal space in this competing world, improves skills and provides scope for better serving our community and working towards its development. NAAC has continuously been involved in setting quality standards and assessing the functioning of institutions. The mandate of NAAC as reflected in its vision statement is in making quality assurance an integral part of the functioning of Higher Education Institutions. It lays emphasis on imparting employment-oriented education, providing dignity of labor amongst youth and commitment for the social upliftment of marginalized people.

Treading along the similar lines, Government Home Science College is one such pioneer institution of North India imparting Home Science Education and disseminating the role of higher education in shaping the future of the students. The process not only helps in the enhancement of an individual but also contributes towards the formulation of a formidable society

The present book entitled "Quality Enhancement in Higher Education" is an outcome of scholarly exercise carried out in the National Seminar on "Quality Enhancement in Higher Education" held at Government Home Science College, Sector 10 Chandigarh. The seminar is a step to ensure that the vision of education is not just limited to providing knowledge but also to enhance the quality to secure increased competence and professional development of students. This book offers a vast plethora of views of educationists as a step to signify how education can be made more meaningful and lead to entrepreneurship and skill development. I hope our attempt will result in successful dissemination of the concept and we can all strenghten the development of our nation by adopting the challenging initiatives for stimulating the yardstick of higher education.

Prof. Dr. (Mrs.) Sudha Katyal, Principal
Govt. Home Science College
Sector 10, Chandigarh

ACKNOWLEDGEMENT

No one who achieves success does so without acknowledging the help of others. The wise and confident acknowledge this help with gratitude.
~Alfred North Whitehead~

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Issues, Concerns, and Challenges of Higher Education in India

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ABSTRACT

Higher education in India is the largest in the world in terms of the number of institutions. It has undergone rapid development after the post-independence era. The role of Indian higher educational institutes such as colleges and universities in the present time is to provide quality-based education in the field of education, research and to empower youth for self-sustainability. The government of India has established UGC and AICTE to regulate the standards and spread quality higher education. The main objective of the study is to identify the issues and challenges in the field of higher education in India. This paper discussed the issues of higher education and direction to improve higher education in India.

Keywords: *Higher education, Objectives, Issues, Concerns, Challenges, and Problems.*

Introduction

Higher educationrefers to a level of education that is provided byuniversities, vocational universities, community colleges, liberal arts colleges,institutes of technology and other collegiate-level institutions, such asvocational schools, trade schools, and career colleges, that award academicdegrees or professional certifications, higher education imparts knowledge, develops the student's ability and also give him/her a wider perspective of the world around. Higher education becomes an input to the growth and development of industry and also seen as an opportunity to participate in the development process of the individual through a flexible education model.

Higher Education in India

Next to China and the United States, India has the third-largest higher education system in the world in terms of size and its diversity and largest in the world in terms of the number of educational institutions. After independence Indian higher education attains massive growth.In the Indian system, higher (tertiary) education starts after the 10+2 (i.e. ten years of primaryand secondary education flowered by two years of senior secondary education). The framework of higher education in India is very complex. It includes various types of institutions likeuniversities, colleges, institutes of national importance, polytechnics, etc. Universities are also of different types like central universities which are formed by the government of India, by an act of parliament which are responsible for arranging and distributing resources required by university grant commission(UGC), State universities, Deemed universities (aided and unaided) and Private universities. India has a federal set-up and the Indian constitution places education as aconcurrent responsibility of both the centre and state. While the centre co-ordinates and fixedstandards in higher and technical education, school education is the responsibility of the state.

According to the statistics of 2015, there are 45 Central universities, 290 State universities, 130 Deemed universities, and 90 private universities in India. Former Indian Prime Minister, Manmohan Singh had said that India has very low enrolment in the field of higher education. Two- thirds of our universities are having a percentage of below average in their progress.

Objectives of Higher Education

- To seek and cultivate new knowledge vigorously in the pursuit of truth and to interpret old knowledge in the light of new needs and discoveries.
- To provide the right kind of leadership in all walks of life.
- To identify gifted youth and help them to develop their potentiality to the full.
- To provide society with competent men and women trained in agriculture, arts, medicine, science, and technology.
- To strive to promote equality and social justice and to reduce social and cultural differences.
- To foster in teachers and students the attitudes and values needed for developing the 'good life' in individuals and society.

Programme and Strategies to Impart the Necessary Dynamism to the Higher Education System:

(i) Consolidation and expansion of institutions.
(ii) Development of Autonomous colleges and departments.
(iii) Redesigning of courses.
(iv) Training of teachers.
(v) Strengthening of Research.
(vi) Establishment of Open University and Distance Learning.
(vii) Delinking Degrees from Jobs.
(viii) Improvement inefficiency.
(ix) Preparation of code of professional ethics.

Issues, Concerns, and Challenges of Higher Education in India:

- **Teaching Quality**

  The first issue that higher education in India is facing is decreasing teaching quality. Teachers are not well trained and qualified for the job they are assigned to.

- **Structure of Higher Education**

  Management of Indian education faces challenges of over-centralization, bureaucratic structures and lack of accountability, transparency, and professionalism. As a result of the increase in a number of affiliated colleges and students, the burden of administrative functions of universities has significantly increased and the core focus on academics and research is diluted (Kumar,2015).

- **Privatization**

  Privatization is also a big problem that higher education faces. However, just privatization is not going to solve the problem. You need to foster the culture of creativity, imagination and learning new skills in young students.

- **Gap in Supply and Demand**

  The Gross Enrolment Ratio (GER) of India in higher education is only 15% which is quite low as compared to the developed as well as, other developing countries. With the increase of enrolments at the school level, the supply of higher education institutes is insufficient to meet the growing demand in the country.

- **Mushrooming of Low-Quality Institutes**

  Mushrooming of low-quality institutes all over the country is not good for higher education. These new colleges lack capacity and they are all about fleecing money from students and their parents. There are too much glamour and less quality of education.

- **No Project-Based Learning**

  Higher education lacks project-based learning. Young graduates need to learn new skills especially vocational skills that can give them a job.So we are not focusing on project-based learning at all. Just theory is not enough, we also need practical knowledge is also.

- **Low employability of Graduates**

  One of the major problems in India. Only a small proportion of Indian graduates are considered employable. Placement outcomes also drop significantly as we move away from the top institutes.

- **No Strategy**

  There is no strategy for higher education in India. We don't have foreign students coming to the country and studying here. Rankings of our university on Global, Asian levels reflect the poor state of quality in education. Lack of quality coupled with poor access forms a vicious cycle for students.

- **Inadequate Facilities and Infrastructure**

  In India, many of the universities don't have adequate infrastructure or facilities to teach students. Even many private universities are running courses without classrooms. Internet and Wi-Fi facility is still out of reach of many students.

Higher Education and Researches in India

Growth of Higher Education System

Figure 1: Universe of Higher Educational Institutions in India

There were 20 Universities and 500 Colleges at the time of independence.

At present, Universities and university-level institutions

399 State Universities

333 State Private Universities

45 Central Universities

126 Deemed Universities

130 Institutions of national importance established under Acts of Parliament

6 Institutions established under various State legislations.

Current Budget for Education Sector

The Centre on earmarked Rs 93,847.64 crore for the education sector for 2019-20, an increase of over 10 percent from last budget allocation.While Rs 37,461.01 crore has been allocated for higher education, an amount of Rs 56,386.63 crore has been earmarked for school education.Last year, then finance minister ArunJaitley had allocated Rs 85,010 crore for the education sector.Presenting an budget for 2019-20 in Parliament Union Minister for Finance and Corporate Affairs PiyushGoyal proposed the launch of a scheme named 'Revitalising Infrastructure and Systems in Education (RISE) by 2022' with a total investment of Rs 1 lakh crore in the next four years to step up investments in research and related infrastructure in premier educational institutions. The government allocated Rs 608.87 cr for research and innovation from the previous allocation of 350 cr.

Equity in Education

Gender Equity Women constitute 48% of the total population of India. The principle of gender equity is enshrined in the Indian Constitution in its preamble, fundamental, rights, fundamental duties, and directive principles and also reducing the gender gap in higher education is a focus area. The enrolment: women students - 56.49Lakhs constituting 41.40% of the total enrolment (Of the total women enrolment, 14.72% women have been enrolled in professional courses).

States having the highest and lowest enrolment of women

Highest in Goa (59%)

Lowest in Bihar (30%).

Status of Women in Higher Education

There has been a phenomenal growth in the number of women enrolled in higher education since independence. Women enrolment - was less than 10% of the total enrolment on the eve of independence and it has risen to 41.40%.

Critical appraisal of the Indian Higher System reveals that though there is a proliferation of higher educational institutions, however, due to the prevailing systemic deficiencies, it continues to produce graduates that are unemployable despite emerging shortages of skilled manpower in an increasing number of sectors. Deterioration of standards of education and research, inadequate infrastructure and facilities, large vacancies in faculty positions, low student enrolment rate, etc. are the manifested consequences.

Excellence and expansion

Indian higher education, the significant and impressive developments of the past few decades faces major challenges in both quantitative and qualitative terms. Perhaps the clearest and boldest statement of this issue can be found in the "Report to the Nation 2006" of the National Knowledge Commission

which concludes that there is "**a quiet crisis in higher education in India that runs deep**", and that it has to do with both the quantity and the quality of higher education and research in India.

Regulation and governance

Besides its quantitative limitations and qualitative deficits, Indian higher education is also considered to be sub-optimally organized and significantly overregulated, limiting initiatives for change. In its assessment of the existing regulatory arrangements, the National Knowledge Commission concludes: "In sum, the existing regulatory framework constrains the supply of good institutions, excessively regulates existing institutions in the wrong places and is not conducive to innovation or creativity in higher education."

According to the UNESCO Reporton Education in the 21st century, Higher Education is the mandate to bridge the knowledge gap between countries and communities, enriching dialogue between people and cultures; international linking and networking of ideas, research and technologies. Thus, higher education provides the competencies that are required in different spheres of human activity, ranging from administration to agriculture, business, industry, health and communication and extending to the arts and culture. However, the equity and quality in higher education are projected as dichotomous in India. It appears that there is very little truth in it. According to the World Human Development Report titled "Equity and Development" emphasized on Human Development and concentrated on equity. The reports have emphasized the need for providing equality of opportunity to achieve development.

Suggestions for Improving the System of Higher Education

- Ensuring Digital classroom for students.
- There should be a multidisciplinary approach in higher education so that students' knowledge may not be restricted only up to his own subjects.
- Introduce innovation in the curriculum.
- There is a need to implement innovative and transformational approaches form primary to higher education levels to make the Indian educational system globally more relevant and competitive.
- Higher educational institutes need to improve quality and reputation.

Conclusion

The needs of higher education cannot be met by the Government alone. It needs theparticipation of the Government, the private providers and perhaps selectively participation offoreign universities. We have to free ourselves from the mindset and take a realistic attitude,taking into consideration the fact that a major revolution is taking place in higher education inthe world. We have to take certain steps for the improvement of our higher education system.

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Higher Education: Evolutionary and Existing Scenario

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ABSTRACT

Education is the central force for the progress of the nation. The socio-historical journey of higher education in India has evolved through different periods, viz., ancient, medieval, colonial, post-independence and contemporary. English education takes a position in higher institutions of learning. The institutions of higher learning are considered the most important agency of social change, social transformation, and the entire development of the country. First Education Commission (1948) After Independence, Kothari Commission (1964-66 The National Policy on Education 1986) outlined various important aspects for improvement of quality of higher education. The Knowledge Commission recently advocated the need for expansion of Universities and Colleges in India. The number of institutions in India is more than four times the total number of institutions in both the USA and Europe. India is dashing headlong towards economic success and modernization and aspires to become a 5 trillion-dollar economy by 2024. The 'National Student and Faculty Startup policy 2019' guides the educational system for orienting towards startups and entrepreneurship opportunities for students and faculties. In India, innovation is still not the epicenter of education. 'Innovation and Startup' culture is the primary focal point of our higher education system to meet the need of this hour. Yet the weakness clearly outweighs the strengths. There are certain challenges to meet the need of this hour for higher education. Certain measures are discussed for meeting the challenges. Therefore, this paper focuses mainly on the socio-historical development of higher education in India from the ancient period through to the present, certain challenges and the measures to improve upon so as to get the best outputs for the overall development of the Nation with highly educated all-around developed citizens.

Introduction

"Education is the process of training man to fulfill his aim by exercising all the faculties to the fullest extent as a member of society" (Aristotle). Education is all one with growing; it has no end beyond itself. (Education is everything along with growth; education itself has no final destination behind him)" (John Dewey). Education is defined as the acquisition of knowledge, skills, values, beliefs, and habits that facilitate the integration of the younger generation into the logic of the present system. Educated citizen deals critically and creatively with reality to participate in the transformation of their world.

Higher Education is obtained after completing 12 years of schooling for the duration of 3 years that can be General, Vocational, Professional or Technical education that serves as the basis of future innovation and progress.

The socio-historical journey of higher education in India has evolved through different periods beginning from ancient, medieval, colonial, post-independence and contemporary. In this journey, the English education system has an important position in higher institutions of learning that are considered the most important agency of social change, social transformation and the entire development of the country.

The journey of higher education started with an ancient system of education in the Vedic period. Religious values were given importance at those times. But the major change in Indian higher education took place after the initiatives taken by British rulers with certain pros and cons. At present, the number of institutions in India is more than four times the total number of institutions in both the USA and Europe. But the average size of an Indian higher education institution in terms of enrolment numbers is much smaller (500-600) to that of Europe and the USA (3,000-4,000) and China (8,000-9,000).

India is dashing headlong towards economic success and modernization and aspires to become a 5 trillion-dollar economy by 2024. Indian higher education system is counting on high-tech industries like IT and Biotechnology so as to propel the nation to prosperity. India has the third-largest in the world higher education sector, The 'National Student and Faculty Startup policy 2019' guides the educational system for orienting towards startups and entrepreneurship opportunities for students and faculties. 'Innovation and Startup' culture is the primary focal point of our higher education system to meet the need of this hour. Yet the weakness clearly outweighs the strengths. Educationists from different fields continually worked for improving the education scenario.

First Education Commission (1948) After Independence

The first commission on university education (1948-49) appointed after Independence in 1947 under the chairmanship of Dr. S. Radhakrishnan.He set out the basic aims of university education that ensured the reorientation of higher education to meet the national demands in the changed context. It outlined the goals of the university as follows:

• Fostering leadership in all walks of life by helping individuals to develop their potential.

• Providing society with competent men and women trained in all professionsas cultivated individuals.

• To promote equality and social justice.

• To reduce social and cultural differences through the diffusion of education.

• Fostering attitudes and values needed for developing a good life in individuals and society.

• To bring the universities closer to the community through the extension of knowledge and its application to problem-solving.

Kothari Commission (1964-66)

The most important document on Education in India is the report of the Education Commission under the chairmanship of Dr. D. S. Kothari, then Chairman, UGC, to advise the Government of India regarding the national pattern of education and general principles and policies for the development of education.."[Report of The Education Commission (1964-66)Education and National Development, Government of India, New Delhi, Part I and Part II. 1985]. This report made very important recommendations that covered all aspects of the future development of national education that emphasized the need for built-in flexibility in the system of education.Education should be science-based and coherent with Indian culture and values (Power, 1995 p. 39). Introducing work experience as an integral element of general education

improves quality of teachers in our universities to lay special emphasis on the combination of teaching and research and to pay particular attention to education and research in agriculture and allied sciences (Report of The Education Commission (1964-66) Education and National Development, Government of India, New Delhi, Part I and Part II. 1985).

The report stressed that there had to be

- A radical improvement in the quality and standard of higher education and research
- To ensure the quality of research development of other universities and affiliated colleges
- Improvement in teaching and evaluation by re-organization of courses and examinations, opportunities for part-time education, and special attention to women's education.

The National Policy on Education 1986

The policy aims at not only developing human power for serving the economy but also at developing crucial values (Power, 1995 p. 40). The policy indicates a major thrust in higher education (Mukhopadhyay, 1999 pp. 54-55) incorporating: a. expansion of higher education b. improvement of the quality of higher education, and c. increased relevance and job orientation in higher education.

Recent Trends in Higher Education

Higher education plays an important role in imparting quality education and promoting the economic development of the country and to cope up with the changing priorities of the people for existence in the global world.Introduction of "cost recovery" principles results in a hike in fees contributing to a reduction in the burden of the government in financing higher education.

Challenges in Higher Education Institutions: The "higher education" and "economic development" are interlinked as the improvement in one field leaves a positive impact on the other. The initiatives should be taken so as to build highly qualified manpower for the growth and development of the country. The scope of higher education is not only restricted to bachelors or masters. It includes vocational and professional qualifications too. It must be quoted somewhere "that giving the management of the country in highly qualified hands is an assurance that it will lead to a progressive path". There are many basic problems facing higher education in India today that include inadequate infrastructure and facilities, large vacancies in faculty positions and poor faculty, low student enrolment rate, outmoded teaching methods, declining research standards, unmotivated students, overcrowded classrooms and widespread geographic, income, gender, and ethnic imbalances.

Ensuring equitable access to quality higher education for students coming from poor families is a major challenge. Students from poor backgrounds are put to further disadvantage since they are not academically prepared to crack highly competitive entrance examinations.Education in basic sciences and subjects that are not market-friendly has suffered. Research in higher education institutions is at its lowest ebb. There is an inadequate and diminishing financial support for higher education from the government and from society.

A series of judicial interventions over the last two decades and knee-jerk reaction of the government at the centre and state level has further added confusion to the higher education system in the country. There is an absence of a well-informed reform agenda for higher education in the country. The government should rethink these areas to implement more on the policies. Money also plays a vital role in the education system which needs to unique for all globally recognized syllabus and curricula. There is a need to change such defects from the country education system which only can be influenced by increasing funding and providing better facilities to students. The government tries to make different policies that are implemented but quality never checked. The majority of the fund goes in the pockets of officials working for this. There is a vast need to improve the quality of higher education.

Measures to Improve the Quality of Higher Education

The Government should undertake the measures to improve the quality of higher education by **Encouraging Individuality, the** involvement of **Tech-Savvy Methods of Teaching Making, the Curriculum Dynamic**, the introduction of **High-Tech Libraries and observing The Power of Alumni.** Higher education should possess various qualities like inculcation of confidence and the ability to take responsibility. Prepare students to be effective within the circumstances of their lives and work. Promoting excellence for development and application of knowledge and skills imparting higher education.

In November 2016, All India Council of Technical Education (AICTE) released a Startup Policy document for AICTE approved institutions for addressing the need for the inculcation of innovation and entrepreneurial culture in HEIs. The policy primarily focused on guiding the AICTE approved institutions in implementing the 'Startup Action Plan' of Government of India. Special emphasis should be given on developing the creative potential of each individual, in all its richness and complexity. Students must develop not only cognitive skills - both 'foundational skills' of literacy and numeracy and 'higher-order' cognitive skills such as critical thinking and problem-solving skills - but also social and emotional skills, also referred to as 'soft skills'. Including cultural awareness and empathy, perseverance and grit, teamwork and leadership. The process by which children and adults acquire these competencies is also referred to as Social and Emotional Learning (SEL). Bringing professional education into mainstream undergraduate education should be created as an integrated approach to education embodying the spirit of the Policy in totality. Finally, the concept of interconnectedness also applies to the location of education in a social context. The holistic nature of knowledge through a broad and interwoven education is an important factor for the preparation of students for life, work and to be an effective member of society. Several institutions of higher studies across the world have implemented what we today characterise as Liberal Education through an array of different disciplines that include the Arts, Humanities, Mathematics and Sciences suitably integrated with a deeper study of a special area of interest. The available assessments on such an approach that integrate the humanities and arts with Science, National Education Policy 2019, Engineering, and Mathematics (STEM) have shown positive learning outcomes. The characterization/delineation of the university structure at different levels is based on the integration of higher education with research, keeping interdisciplinarity as a central concept.

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Enhancing Sustainability of Higher Education Institutions

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ABSTRACT

To support the government's agenda of 'providing education to all', colleges and universities are being set-up in an ever bigger number and space. Increased competition and privatization in the education sector have led to the development of these universities as a whole township, encompassing the latest technology and infrastructure, and housing thousands of students in the same area. Educational buildings consume more energy next to the industries and information technology parks. This has resulted in increased usage of renewable and non-renewable resources of energy which in turn has caused increased carbon emissions and waste generation from these buildings. This unsustainable growth and development of our educational buildings have negatively impacted our immediate environment. Therefore, it has become important to make these buildings sustainable in their growth and development. A sustainable building is not an option but a necessity today, as they help in reducing and reversing pollution and conserving our environment for future generations. Transforming existing educational building into a sustainable building is neither a costly process nor impossible. By adopting sustainable practices such as efficient use of energy, water and use of renewable resources we not only transform higher education institutions into sustainable ones but also enhance the quality of education in these institutions.Research studies have shown that sustainable building design is linked to improving over well-being and productivity of its occupants. Therefore, this paper aims at identifying such sustainable practices that can be easily followed to enhance the sustainability of higher education institutions.

Key Words *Higher Education Institutions (HEIs), Sustainable Practices, Sustainable Building (SB), 7 R's, Sustainability*

Introduction

A study has suggested that conventional buildings consume large amounts of energy in their daily operations(1). These buildings contribute up to 30% of global annual greenhouse gas emissions and consume up to 40% of all energy (2). A study by (3)suggests energy is an important parameter that makes educational institutions sustainable. Due to increasing student intake in Higher Education Institutions (HEIs), new buildings are being constructed to meet infrastructure requirements which have resulted in increased energy consumption, increased carbon emissions and increased usage of non-renewable resources. Thus, to reduce the excessive consumption of resources and to conserve them for future generations, it is important that the educational buildings adopt sustainability and implement sustainable practices in their daily operations.

Sustainable building (SB) is defined as a structure that is environmentally responsible and energy-efficient throughout its life-cycle: from building design, construction, operation, maintenance, renovation to deconstruction. SB design involves careful selection of site; optimum usage of energy and water by the building; minimum use of freshwater from external sources; increased use of renewable natural resources onsite; use of non-toxic, recycled and locally available building materials; recycling the waste generated, and providing healthier spaces with highest indoor air quality for its occupants.

According to the National Building Code(4) SB design saves 36-40% water, 30-40% energy and 25-40% material as compared to a conventional building. They have emissions savings potential of 84 gigatonnes of CO_2 by 2050 through energy efficiency, fuel switching and use of renewable energy- (5). With an upfront investment of 2% in SB design, the resulting life savings is 20% of the total construction costs. Along with this increase in monetary savings, SB has been proven to increase the productivity and overall well-being of its occupants. Studies have shown a link between improved lighting design and a 27% reduction in the incidence of headaches (6). According to research studies conducted by World Green Building Council, SB is linked to improvement in occupant's cognitive score (brain function) and performance enhancement by 8% (7)Supporting this fact, the construction or transformation of sustainable HEIs is the need of the hour.

In recent years, people around the world have recognized that current development trends are not sustainable and that public awareness, education, and training are the keys to move society towards sustainability (8). Lately, HEIs have become key drivers of education for sustainable development for the new generation (9). These institutions are disseminating knowledge to sensitize society in promoting a more resource-efficient economy and greater environmental friendliness (10). This highlights an immediate necessity to adopt sustainability in every educational building to promote a sustainable and healthy ecosystem for the next generation. Sustainability in HEIs can be defined as a process of developing and managing campuses through the efficient use of renewable resources and other sustainable practices (3). Sustainable practices are those practices which when carried out do not have a negative impact on the global or local environment. These practices help to reduce wastage of resources, emission rates and harm on the environment; while increasing resource efficiency through the concept of 7 R's of sustainability.

7 R's OF SUSTAINABILITY (11)

1. **RETHINK:** stop and think about your choices and their impact on the environment
2. **REFUSE:**say NO to non-biodegradable and non-recyclable products
3. **REDUCE:**reduce consumption of non-renewable resources for building operations
4. **REPURPOSE:** transform packaging, used clothes, etc. that we no longer use in our daily life into arts and crafts
5. **REUSE:** discourage one-time use products, inculcate the concept of reuse
6. **RECYCLE:**set-up recycling mechanisms onsite to create innovative products
7. **ROT:**construct composting pits around the college campus and transform organic waste into nutrient-rich manure

Case Studies- Sustainable HEIsIn India (11)

S.No.	INSTITUTION	DETAILS	STRATEGIES ADOPTED
1	Indian Institute of Technology (IIT)-Gandhinagar	**Location:** Gujarat **Site area:** 211795 m² **Built-up Area:** 127534 m² **GRIHA Rating:** 5 stars **Year of Completion:** 2017	**Sustainable site planning:** stormwater management planned to reduce peak run-off **Water management:** annual water demand reduced by 41.86% through the use of treated wastewater, low-flow fixtures, 100% wastewater treated by DEWATS system installed onsite **Energy optimization:** street lights with automatic switches **Solid waste management:** Biogas plant installed onsite
2	BEL Academy for Excellence, Bengaluru	**Location:** Karnataka **Site area:** 23239.5 m² **Built-up Area:** 7671 m² **GRIHA Provisional Rating:** 5 stars **Year of Completion:** 2017	**Sustainable site planning:** site barricading, coverage of dusty materials to reduce air pollution, existing mature trees transplanted **Water management:** low-flow fixtures and dual-flush system reduced building water demand by 73%, landscape water demand reduced by 46% through the use of native vegetation **Energy optimization:** 55.6% of habitable space daylit, passive design measures and thermal insulating envelope comprising of fly-ash bricks and double glazing units **Renewable energy technologies installed on site:** solar PV system of 90kWp
3	Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER)-Puducherry	**Location:** Tamil Nadu **Site area:** 20080 m² **Built-up Area:** 22071 m² **GRIHA Provisional Rating:** 4 stars **Year of Completion:** 2019	**Sustainable site planning:**736m³ of topsoil reused in landscaping, site barricading to reduce air pollution **Water management:** water-efficient fixtures reduced building water demand by 62.32%, landscape water demand reduced by 54% **Energy optimization:** 51.25% of habitable space daylit, lux level of interior lighting as per NBC 2005, EPI reduction of 64% demonstrated **Renewable energy technologies installed on site:** solar PV system of 15kW

| 4 | IIT Delhi Lecture Hall Complex | **Location:** New Delhi
 Site area: 19690 m²
 Built-up Area: 45760 m²
 GRIHA Provisional Rating: 4 stars
 Year of Completion: 2015 | **Sustainable site planning:** Existing trees preserved and transplanted, excavation and construction started after the monsoon to prevent soil erosion
 Water management: use of low-flow fixtures to reduce building water consumption- 81.6%
 Energy optimization: external shading and glazing to reduce solar heat gain, energy-efficient artificial lighting design
 Renewable energy technologies installed on site: rooftop solar PV systems of 1000kW |

SUGGESTED SUSTAINABLE PRACTICES FOR HEIs

Following sustainable practices should be adopted in HEIs to enhance their sustainability:

- Follow 7 R's of sustainability as far as possible
- Ban usage of single-use plastics, non-recyclable materials, plastic packaging, plastic cutlery on campus
- Promote segregation and collection of wet, dry and e-waste
- Enforce recyclingof all dry and wet waste generated on campus into innovative products
- Install bio-gas plant and composting pits to transform organic waste into manure
- Installation of solar PV systems on campus for energy generation and consumption
- Install wastewater treatment and recycling systems on campus
- Harvest rainwater to use tertiary water in building operations
- Minimization of run-off loss through green site creations (bioswales)
- Adopt green landscaping strategy
- Reduce the O&M costs of the building
- Promote higher performance standards in the building (installstar rated electrical appliances and sensory lighting systems and plumbing fixtures)
- Increase conservation and efficient use of energy in building
- Mandatory use of sustainable building construction materials
- Use less paper, go digital- take notes and communicate electronically
- Incentivize the use of public transport, carpooling and bi-cycles amongst students and staff
- Encourage students to adopt and look after plants
- Register your institution with green rating institutions (IGBC, GRIHA, BEE)
- Energy-efficient design of buildings

Conclusion

The rising and alarming situation of depleting natural resources and the polluted environment has become an issue of national importance. Environmentalists, Educationists, and concerned Stakeholders are continuously seeking out potential measures to address this issue on a priority basis. The sustainable building concept and practices in HEIs will not only help in addressing this national issue but will also help in improving the overall well-being and enhancing the productivity of the building occupants. Therefore, adopting sustainable practices in HEIs is the need of the hour.

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Infusion of Entrepreneurial Skills in Higher Education: Need of an Hour

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ABSTRACT

Entrepreneurship plays a pivotal role in the overall development of an economy. Right from creating jobs, boosting investment and output, enhancing national income and also expanding trade relations, startups are the crucial prerequisites to promote entrepreneurship. Nonetheless in recent years government has started a lot of initiatives to promote startups both at the academic and institutional levels. Moreover, the recent research reports of State Bank of India releasedon a dip in employment levels in the Indian economy, has drastically called up the need for generating self-employment opportunities. However, there is a lack of knowledge and ignorance on the part of students to undertake their own startups. An element of hesitation, procedural difficulties and poor knowledge restrict them to undertake their own self-employment opportunities and thereby they always end up going for underpaid jobs. Although various IITs and engineering institutions still produce a large number of entrepreneurs and startups in India, Still a gloomy picture comes from various other skilled and professional institutes like ITI's and polytechnics. Ironically, the students from these institutes are specialized in their trades yet they are not fully aware of how to undertake their own startups and also lack funding opportunities. Further underpaid jobs, lack of adequate employment opportunities and increasing skill gap impede the employability of students passing out from higher education institutes.This paper tries to explore the need for entrepreneurship in India in general and in higher education in particular. The paper also gives recommendations to promote entrepreneurship in higher education institutes. To foster entrepreneurship, higher education institutions in India should boost incubation and promoting startup culture at the institutional level. Further practical exposure regarding various aspects of entrepreneurship should be introduced in the curriculum. Wholehearted efforts on the part of all stakeholders are prerequisite for making India an entrepreneurial economy.

Keywords: *Entrepreneurship, Startups, Skill development, Employment.*

Introduction

Indian higher education system is considered one of the largest in the world in terms of numbers of higher educational institutions (Higher education institutions) and stands among top three of the largest startup ecosystem. In last 10 years, Indian higher education system has grown by 79%. Presently, India

has more than 41435 Higher education institutions with annual enrolment of 28484746 students. Further India's workforce is expected to increase by approximately 27% by year 2022 (India Skill report 2019), these students needed to be prepared for the roles that have a future.

When India aspires to become 5 trillion GDP economy by 2024, it is very important to achieve excellency in both quantitative and qualitative growth of education system by making it globally relevant, competitive and industry fit while simultaneously focusing on self-employment through emphasis on innovation, skills and entrepreneurship among students and faculty. The most common reason that researchers and experts promote entrepreneurial education is that entrepreneurship is seen as a major engine for economic growth and job creation (Wong et al., 2005). The present paper tries to examine the need of entrepreneurship in higher education in India and pedagogy to be adopted by the educational institutes to promote startups and entrepreneurial skills at the institutional levels.

Why Entrepreneurial skills are to be infused at Higher Education levels

Unfortunately, the Indian economy is going from phase where unemployment is on the rising trend. Colleges are under more pressure than ever to turn degrees into jobs for their students but something isn't adding up. Over 50 percent of recent graduates are either unemployed or underemployed. (Greeu and Denes, 2017). The following diagram shows the rising extent of unemployment in India from year 1972-73 to year 2018-19. The following diagram clearly pops out highest unemployment rate of 6.1 % in 2017-18 since 1972-73.

Diagram 1.

Percentage of Unemployment rate over the years in Indian Economy

Source-SBI Research ECOWRAP Report (2019)

As per recent reports from State Bank of India research (2019), there is a forecast of lowest job creation in fiscalyear(FY) 2020. State and Central Government are supposed to create close to 39,000 jobs less in fiscalyear2020as per current trends. Hence, the number of new payroll created infiscalyear2020 could be at least 16 lakh lower than infiscalyear 2019. In the present economic situation, having knowledge of an academic subject is no longer sufficient for a new graduate. Students are increasingly required to have skills and abilities which will help them undertake their own ventures even if they are not employed by others.

Further data fromPeriodic Labor Force Survey (PLFS) 2017-18, clearly indicates lack of job opportunities and falling percentage of salaried/ employed and casual workers.

Table 1 depicts the rising percentage of self-employed/those undertaking their own work as compared to wage/salaried class and casual labour due to narrowing scope of getting adequately paid up jobs.

Table 1

Percentage Distribution of Workers by Status in Employment during 2017-18 on All India Basis

Category of Employment				
Category of persons	Self employed	Regular wage /salary	Casual labour	All
Rural				
Male	57.8	14.0	28.2	100.0
Female	57.7	10.5	31.8	100.0
Urban				
Male	39.2	45.7	15.1	100.0
Female	34.7	52.1	13.2	100.0
Total (Rural+urban)				
Male	52.3	23.4	24.3	100.0
Female	51.9	21.0	27.1	100.0

Source-Periodic Labor Force Survey (PLFS)(2017-18)

The above table shows the percentage distribution of workers according to their status of employment. It is clear that percentage of self-employed in rural area is higher due to lack adequately paid up job opportunities; it is 57.8 % in males and 7.7 % in females as compared to percentage of males and females in urban areas which is 39.2 and 34.7 respectively. However, overall the percentage of self-employed, is higher 52.3 %and 51.9% as compared to salaried class and casual labour. Thus rising number of persons in self-employment category indicates the more demand for entrepreneurial skills and at the same time lack of employment opportunities in service industry.

Current education programs are still not focused enough on the needs of the future labor market. With the current Indian unemployment rate hovering around 6 percent and most of pass out students are looking for jobs, why are many employers claiming they can't fill their vacant positions? The reason is existing skills gap that threatens the sustainability of businesses around the world. Skills gap is a shortage of people skilled in the STEM (science, technology, education, and math) industries, there also is a gap in soft skills such as communication and advanced leadership skills. In this scenario the reskilling of working force by equipping them with entrepreneurial skill becomes a mandate.

In the light of above data it is imperative to promote entrepreneurial skills among working population. In this need of hour start ups and innovation can act as key instruments to gear up the socio-economic development process,thus making Higher education institutions innovative and entrepreneurial in function. This will certainly help to produce more innovators and entrepreneurs, further, improving India's positioning in global ranking for quality of higher education from the current 24th and also moving up in the Global Innovation Index from current position of 52nd in 2019 to among top 30(National Innovation and Startup Policy 2019 for Students & Faculty)

Steps to be taken up to promoteEntrepreneurship in higher education

Investment in the entrepreneurial activities should be a part of the institutional financial strategy. Minimum 1% fund of the total annual budget of the institution should be allocated for funding and supporting innovation and startups related activities through creation of separate 'Innovation fund'.

Bringing in external funding through government (state and central) agencies and non-government sources,sponsorships and donations should be encouraged. To support technology incubators, academic institutes may approach private and corporate sectors to generate funds, under Corporate Social Responsibility (CSR). Institute should actively engage alumni network for promoting Innovation & Entrepreneurship (I&E)Pedagogy and Learning Interventions for Entrepreneurship Development should include cross disciplinary learning using mentors, labs, case studies, games, etc. Student clubs/ bodies/ departments must be created for organizing competitions, bootcamps, workshops, awards, etc. These bodies should be involved in institutional strategy planning to ensure enhancement of the student's thinking and responding ability. Institutes should start annual 'Innovation & Entrepreneurship Award' to recognize outstanding ideas, successful enterprises and contributors for promoting innovation and enterprises ecosystem within the institute.

For creating awareness among the students, the teaching methods should include case studies on business failure and real-life experience reports by startups.

Entrepreneurship education should be imparted to students at curricular/ co-curricular/ extracurricular level through elective/ short term or long-term courses on innovation, entrepreneurship and venture development.

Integration of expertise of the external stakeholders should be done in the entrepreneurship education to evolve a culture of collaboration and engagement with external environment.

In the beginning of every academic session, institute should conduct an induction program about the importance of innovation and entrepreneurship; so that freshly inducted students are made aware about the entrepreneurial agenda of the institute and available support systems.

Curriculum for the entrepreneurship education should be continuously updated based on entrepreneurship research outcomes.

It is important to understand that entrepreneurship is about risk taking. One must carefully evaluate whether a student is capable and willing to take rise.

Gibb (2008) proposes that in order for entrepreneurial education to be embedded into the education system, it should be "child centered in primary education, subject centered in secondary education, vocational centered in further education and discipline centered at university"

Conclusion

Rising unemployment, the recent recessionand emerging skill gap in the education sector, clearly calls for developing innovation and entrepreneurial opportunities in the economy.Nonetheless, wholehearted efforts on the part of stakeholders arethe foremost initiative to push up entrepreneurship in higher education. Although the government is playing a proactive role in boosting startups through its various measures likeMake in India, Startup India, Atal Innovation Mission,Support to Training and Employment Programme (STEP) and National Skill Development Mission(NSDM) etc. However, more measures should be initiated at grass root levels where students should be encouraged to follow entrepreneurial practice from school curriculum and till the time they reach in higher educational institutions they should be more willing to undertake their own ventures rather than following a job seeker tag.

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Higher Education: A Vital Prerequisite for Start-ups and Establishing Global Business

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ABSTRACT

The specialization in higher education is the key ingredient for developing focus and expertise in a particular area that helps in the development of a successful product and venture. Higher education enables us to make use of advanced technology-based instruments in order to develop nutritional products that can be of global importance. Beverages are an essential part of the healthy lifestyle which is savored worldwide in order to quench thirst, to fulfill the taste, to get the desired energy and essential functional components inside the body. In the scenario of advanced food technology, numerous variety of beverages are being developed; however, protein and functional quality enriched whey-based beverage has the importance and demand worldwide. Whey is the by-product of the dairy industry which gets wasted or disposed of in the approximately annual loss of 70,000 tones of nutritionally loaded whey solids.Consequently, the transformation of the whey into a beverage or health drink would be the most useful and attractive product for human consumption, packed with proteins, minerals, and vitamins. Nevertheless, no whey-based food product has been commercialized up to till date owing to less acceptability and unappealing taste. Moreover, in the current scenario, consumers are demanding fresh food products with minimal processing. Thereby, to meet the global demand for processed products, pursuing higher education of food processing is inevitable for the establishment of global business. High hydrostatic processing (HHP) is a non-thermal food preservation technique that treats the solid or liquid foods between 100-1000 MPa using water as the pressure medium at the room or mild processing temperatures (<60 °C).HHP processing inactivates the harmful pathogens, enzymes, and at the same time puts limited effects on the color, taste, viscosity, appearance, and nutritional value. Therefore, processing the whey with the juice blend using the HPP will result in a healthy beverage.

Keywords: *Pertinent focus, Higher education, Food processing, Nutritional food product, Start-up, Global establishment.*

Introduction

The changes in technology and globalization have made the concept of higher education vital in order to capture the pace of the moving world. The economy of a developing country like India is having the emergent need for sustainable start-ups which can boost its economic status and connect to the consumers worldwide. In order to achieve the target, the focused formal higher education is the only

inevitable tool for establishing any globalized business which in turn will improve the quality of individual, community, and nation. The proficient skill of subject matter and language can be acquired solely through the medium of higher education. The regular academic training needs to be strengthened with the convergent training methods for making individuals excel in their respective fields.

In the area of food, which is the basic source for survival can be used as a potent means and technical skill for enhancing the scale of quality life. Among the food products, minimally processed food products enriched with nutrients and functional ingredients is the need of every consumer, living on the globe. Nutritional and refreshing beverages are favored by all age groups in order to have instant energy with the palatable flavor. The desire of consumption gets further increased if the product is packed with essential nutrients and functional quality. Therefore, there is a strong demand for minimally processed refrigerated shelf-stable beverages. Whey is the major dairy by-product that is discarded by the dairy industries in tons (~85 million tons) all over the globe.[1] Whey is amilk-derived waste product but the interest of food technologists has now drifted to make potential use of its valuable nutrients (in terms of whey proteins and minerals) and health benefits (antihypertensive, strengthening cognitive and muscle strength).[2] The application of the conventional method of food processing (e.g. heating) is unsuitable for the development of whey beverages as heat involves the precipitation of whey proteins, the appearance of dark color owing to the usage of high temperature.[3] Therefore, the technique of high-pressure processing which works on the principle of hydrostatic pressure can process the whey beverage with a minimum disadvantage of nutrient deterioration.

Material and methods

Fresh fruits of cultivated pineapple (*Ananas comosus*)of commercial maturity and milk were purchased from the local market of Chandigarh, India. The fruits were peeled and squeezed using a processor (Inalsa Wonder Maxie Plus). In addition, fruits of Emblica and roots of ginger were washed with sodium hypochlorite, peeled, shredded, and crushed. All the juices were collected separately and filtered using 2 mm steel mesh sieve for discarding pulp particles. The juice of pineapplewas stored at -20 °C until use. For the preparation of whey, milk was acidified with citric acid and precipitated milk was filtered using muslin cloth of 20 μm mesh. The D-optimal mixture design was used for the formulation of whey-lime beverages using Design Expert 7.0 (Minneapolis,USA). Thirty different formulations were formed.The laboratory-scale high-pressure pilot food processor (Model: OCSB, Northants,UK) with 8 mL capacity cylindrical vessel was used in this study. In order to obtain a conventional pasteurized beverage, each 30 mL fresh sample of whey-lime beverage was heated in glass tubes in a thermostatic water bath (Model JSSB 30T) with a maximum temperature of 99 °C and was operated at 98.5 °C.All the untreated and treated (HPP and heat) samples of whey-lime were analyzed for aerobic mesophiles, coliforms, lactic acid bacteria, and yeast. The inactivation effect of treatments was expressed as log CFU/mL.

Results and discussion

HPP treatment of 300 MPa for 15 min at 25 °C kept the counts of mesophiles, yeast, and coliforms less than 1 log CFU/mL in the whey-pineapple beverage for the period of 60 days at 4 °C. On the other hand, heat treatment (90 ± 2°C for 60 s) kept the count of less than 1.2 log CFU/mL during the storage of 45 days. It was observed that counts of both the treatments (HPP and heat) followed a similar pattern over the period of storage ($p > 0.05$). Our results of HPP were inconsistent with Bull et al,[4] where the microbial load in orange juice was detected less than 2 log CFU/mL throughout the shelf life (i.e. 12 weeks) on the application of 600 MPa for 60 s at 20 °C. However, in our study, the use of HPP (at 300 MPa) in coupling with the addition of emblica and ginger juice might have propelled the microbial safety of whey-pineappleto 60 days (~8 weeks) owing to the presence of phytochemicals in these plant-based additives.[3]In addition, the pH of 3.93 ± 0.03 in orange juice-milk beverage kept it microbially safe by 5-log reduction of *Lactobacillus*

plantarum at 200 MPa for 300 s, however, the shelf life was not reported.[4]Moreover, reduction in pH favors the lethality of HPP inactivation of microbial load.[5]Correspondingly, the pH of 4.49 ± 0.02 in whey-lime kept the detection limit of less than 1 log CFU/mL with HPP treatment at 300 MPa. Therefore, the efficacy of HPP treatment resulted in the long shelf life of whey-pineapple beverages.

Conclusion

This study has showcased that the usage of advanced and novel processing of pressure based homogenization resulted in better preservation (~60 days) of whey-based fruit beverage with the retention of nutrient quality in comparison to conventional heating. Thereby, a successful start-up can be established with the help of facilitated food processing methods. With the proficiency in the core area, any idea can be conceptualized to a successful start-up. Therefore, the role of higher education lays the foundation for any successful business and the developed product can be traded worldwide which thereby will result in an enhancement in the quality of lives of individuals followed by community and nation.

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Higher Education: A Step to Foster Innovation and Research Enabling New Product Development: A Review

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ABSTRACT

The role of higher education in the field of Home Science and Foods and Nutrition is immense. It has opened up new avenues and areas for innovation and research enabling in skill development and capacity building. The present paper attempts to review the role of research in new product development. Developing new food and drink products is a complex process - requiring knowledge of ingredients, processing techniques, packaging materials, legislation, and consumer demands and preferences. The product-development literature is vast, ranging from broad-brush explorations to in-depth case studies and across many types of products, firms, and industries. The three emergent research streams are rational plan, communication web, and disciplined problem-solving. Research provides deep knowledge to the reader as well as new product developers. It acts as a medium for creating and exchanging ideas.

Keywords: Product development, communication, discipline, emergent research, deep knowledge, exchanging ideas.

Introduction

Innovation and research are very important for new product development. Conducting research properly at the beginning stages of product development as well as at key points during the process can save a lot of time and help prevent disastrous mistakes. New product development is the main factor of economic progress in building an economic competitive advantage. The life cycle of products becomes very short and it tends to be shorter year by year. It means that innovation becomes the main driving force in the economy. This research study underlines the role of evaluation of each stage of innovation processesand allows identifying the main problems that hinder innovation and allows developing concrete proposals for improving the innovative environment in the country. Research is a critically important step in the product development process. **Exploratory,evaluative,iterative** are three key stages in the product development process where research plays a main part. In order to understand the expanding role of research in product development it's important to note the different types of research and at what point in the product development stage they take place.

Review of literature

Shona l. Brown kathleenm, Eisenhardt attempted to define Product development, its past research, present findings, and future direction. Their article has three conclusions. Product development literature can be organized into three streams of research product development as a rational plan, communication web, and disciplined problem-solving. They highlighted these three streams of researchwith their key findings, strengths, and weaknesses. Second, they concluded that these streams can be synthesized into a model of factors affecting product-development success. Third, they conclude that there are research implications for the future based on the mixture of support for various findings in the model. Overall, theirarticle attempted to contribute an understanding of past literature, a model of current thinking, and a vision for future research.

Fadiaramouniet al. said that the success of product is dependent on many factors. Realistic goals for a product and sound financial analysis can make a product more apt to prosper. Collecting ample product research assists in creating products that fit consumer desires as well as ones that are competitive in the market place. A good business plan with adequate lists of all necessary tools is essential to building a realistic, profitable business/product. Product development also takes a bit of consumer acceptance, correct timing and luck.

Grit Thangsupanich in1995 studied the Food Research and Product Development and Packaging Practices. In this study, some of the institutions and organizations that play an important role in food research and product development. Packaging practices, issues, and strategies in both the public and private sectors in evidence throughout Thailand are explored. To gain a better perspective of packaging strategies in Thailand, political and economic considerations in the Asia Pacific region are taken into account. Since packaging and packaging materials are vital to growing and newly emerging economies, just as they are to mature economies, issues pertaining to seafood's, pineapples and other fruits, packaged drinks, beer, the packaging of processed chicken and duck meat products are discussed. Many new packaging developments in recent years can be related to the impact of changing energy costs and plastic resins.

B Bigliardi, EBottani , R Montanari et al. werestudied the relevance of product innovations and new product development for the competitive performance of firms and for the longterm economic growth. They said this context of the food industry, process, and product innovations are usually the result of cross-discipline ideas, involving, for instance, biology, chemistry, technology, engineering, nutrition, and law. Furthermore, the food industry suffers from the fact that the benefits of innovations are often not evident in the manufacturing stage. Their paper analysed a successful case of product innovation. The analysis is proposed in the form of a case study-based research, which was carried out through a questionnaire survey and some field interviews with managers of a food company located in Northern Italy. Specifically, the company selected operations as a packaging manufacturer, providing plants, equipment's and sachets for food and drink packaging. The study focuses on the development of a new product, which the company has recently launched on the market in response to the needs of packaging liquid, viscous or creamy foods. By presenting a successful case study, this paper aims to highlight the strengths and weaknesses of the new product development process undertaken by the company (i.e., from the idea of the new product to the launch on the market and patent). At the same time, results presented provide useful guidelines for new product development processes in the food context. (Barbara Bigliardi, EleonoraBottani, Roberto Montanari et al.)

ChuxGervaseIwu in September 2010 described the Impact of product development and innovation on market share engaging in the product they find the conclusion that development and innovation can seriously drive performance in any organisation. They said thatthis is important to note that product development, product innovation and high levels of performance do not come easy. Progressive organizations must see product development and innovation as critical to their existence and

competitiveness. Their research has shown that product development and innovation initiatives are not just enough to secure that rewarding market share. Rather, a much more comprehensible alignment of factors, drive the product development objective to meaningful utilization of resources. A number of significant lessons emerge from this study. These lessons seem to collaborateCooper's (1979) findings. New product quality must be superior to other competing products in order for the innovating organization to reap the rewards of innovation. This research also establishes the significance of customer engagement in the process of innovation. The innovating organisation can also benefit from extended positive team spirit arising from the leveraging of information provided by market intelligence.

Conclusion

Research provides deep knowledge to the reader as well as new product developers. It acts as a medium for creating and exchanging ideas. It helps the developer to build their own opinion about the new product and helps in critical thinking. Reviewing of research also helps in gaining knowledge and information about recent researches and resent trendy products in the market. It also tells about the scope of the product in the market. Research provides an idea about the economy. Research isessential to building a realistic, profitable business/product in Product development. Research provides knowledge about overall management in making a new product. Thus research and innovation is a part of higher education provides a successful launchpad for students to explore their research potentials and engage in vocational and income-generating activities.

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Inclusive Education: Need for a Paradigm Shift in the Higher Education Sector

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ABSTRACT

Education remains a catalyst in bringing about a qualitative transformation in the society. India, as geographically, socially and culturally, a diverse country, aims at taking a quantum leap in 2020 so far as the Gross Enrolment Ratio in the institutions of higher learning is concerned. All the National Education Policies, so far, have emphasised that ensuring equity in education is vital to our democratic framework but it still remains a distant dream. It is important to understand that countries like China, Singapore, South Korea, etc. are making huge investments in the education system. Ironically, private institutions in our country have mushroomed in the last few decades and higher education threatens to be inaccessible to the marginalised sections of our society. We must revitalise our efforts so that higher education is easily accessible to all the sections of the society.

Technological revolution has altered the academic ambience in a significant manner, but our institutions are ill-equipped, by and large, to accommodate differently-abled students. Most often, these institutions do not have the desirable infrastructure to meet their needs. Knowledge resources for these learners are scant and provisions for financial support, too, leave much to desire. It is imperative that our educational institutions are equipped with the desired quality and standards which are essentials for transforming the younger workforce from all sections of the society into a productive human resource.

The proposed paper will seek to draw attention to this relatively-overlooked aspect of higher education and propose a few steps which can pave the way for inclusive education in letter and spirit.

Key Words: *Gross enrolment ratio, Equity, Differently-abled, Marginalized section, Inclusive education*

Introduction

Academic spectrum in India has undergone a tremendous change in the terms of many- fold increase in its institutional capacity since independence. Higher education must form the basis for knowledge creation and innovation in the nation and thereby contribute deeply to a growing Knowledge Economy. University Grants Commission has set a target to increase the Gross Enrolment Ratio (GER) in higher education to 30 per cent by 2020 from the present 25.4% and the National Education Policy 2019 envisions enhancing GER to an ambitious figure of 50% by 2035. To achieve this purpose, inclusive strategies need to be implemented only from the point of view of social justice but also even in terms of economic well-

being. But the fact remains that the most formidable challenge faced by the higher education system in India is the gross inequalities in access to higher education. Regional imbalance, socio- economic disparity and gender inequality affect the education sector too and have a huge impact on enrolment and retention. As per Census 2011, in India, out of the 121 Cr population, about 2.68 Cr persons are 'divyangjan' which is 2.21% of the total population. Such a large number of persons need appropriate and timely intervention for their education, rehabilitation and inclusion but as per AISHE Report 2019, only 85,877 PWD students enrolled in higher education out of which 48,212 are male and 37,665 are female students. In an era where 'inclusive development' is being emphasised as the right path towards sustainable development, focussed initiatives for the welfare of disabled persons are essential. In many higher education contexts disability issues are overlooked in terms of practical considerations and scholarly attention. The present study is an attempt to understand the global concerns and endeavours vis-a-vis persons with disability and the way Indian policy- makers are implementing these to ensure that this section of the society also participates actively in the process of nation building.

The rate of higher education accessibility is only a stock indicator of the national development and Equity considerations assume a variety of dimensions including that of gender, socio-economic background and disability. While the extensive expansion and growth of higher education across the globe has been seen as a way to address these issues, the realisation of an egalitarian mode of education still eludes us.

Inclusive Education (IE) is defined as a process of addressing the diverse needs of all learners by reducing barriers in the learning environment. It is a process of strengthening the capacity of the education system to reach out to all learners. Inclusion as an educational approach and philosophy provides all the students greater opportunities for academic and social progression. Today it is widely accepted that inclusion maximizes the potential of the vast majority of students, ensures their rights, and is the preferred educational approach for the 21st century. This includes equal opportunities to all to participate in social, recreational, arts, sports, extra-curricular activities. From a social perspective, the sole aim of higher education must be to facilitate the development of an aware, enlightened, socially- conscious, knowledgeable, and skilled nation that can uplift its people, and implement effective solutions to its own problems. The purpose of quality higher education is therefore a lot more than creating greater opportunities for individual employment. It must provide students with broad-based multidisciplinary education and specialised knowledge and robust skills so that they can function in a collaborative, inclusive, and inter-disciplinary manner. It represents the key to a more vibrant, socially engaged, and cooperative communities and a more cohesive, productive, innovative, and productive nation. It must be an opportunity to which all citizens can have access and prepare for more meaningful roles.

World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs at the Jometin World Conference (1990), Thailand, set the goals for 'Education for All' and it was proclaimed that every person (child, youth and adult) shall be able to benefit from educational opportunities which would meet their basic learning needs. Further, it was strengthened as the principle of inclusive education was adopted at the "World Conference on Special Needs Education: Access and Quality" (Salamanca Statement, Spain 1994). More than 300 participants representing 92 governments and 25 international organisations met to further the objective of Education for All by considering the fundamental policy shifts required to promote the approach of inclusive educations. With the release of the Salamanca Statement in 1994 (UNESCO), a large number of developing countries started reformulating their policies to promote the inclusion of students with disabilities into mainstream educational institutions.

These deliberations were reinforced by the Inchen Strategy, a UN initiative, to "Make the Right Real" for Persons with Disabilities in Asia and the Pacific which supported a twin track approach of disability-specific and disability-mainstreamed government action at the international level, by 2030. The Sustainable Development Goals in 2015 under United Nations General Assembly pledges for 'leaving

no one behind' and set out Goal 4 in the form of ensuring Quality Education: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

Sending a message that the dignity of the human being is fundamental, the SDG set out targets which had to be fulfilled by 193 nations. They agreed that they can change the world for the better and endeavour to reach the most marginalised sections of the society. It was resolved that this will be accomplished by the consolidated efforts of their respective governments, businesses, media, institutions of higher education, and local NGOs by 2030.

Keeping in view the emphasis world over, Indian academicians and policy-makers have joined hands to ensure equity and inclusion in the higher education sector. One of the earliest formal initiatives undertaken by the Govt of India was the National Educational Policy, 1986, which recommended, as a goal, 'to integrate the handicapped with the general community at all levels as equal partners, to prepare them for normal growth and to enable them to face life with courage and confidence. Sarva Shiksha Abhiyan (SSA) launched to achieve the goal of Universalisation of Elementary Education in 2001, is one such initiative. In 2005, the Ministry of Human Resource Development implemented a National Action Plan for the inclusion in education of children and youth with disabilities.

The National Policy for Persons with Disabilities (2006) recognized that Persons with Disabilities are also a precious human resource for the country and there is a need to create an environment that provides equal opportunities, protection of their rights and full realisation of their potential. People with disabilities face many challenges and barriers like, attitudinal, physical, and financial. Addressing these barriers should be our concern and we have a moral duty to do so. All efforts must be made to facilitate their access to health, rehabilitation, support, education, and employment. In higher education, UGC is supporting universities and colleges in the country to incorporate special education activities so as to empower People with Disability. The UGC initiated the policy of assistance to universities/ colleges for Higher Education for Persons with Special Needs (HEPSN) since the Ninth Five-Year Plan for creating an environment at the higher education institutions to enrich higher education learning experiences of People with disabilities. The Rights of Persons with Disabilities Act, 2016 also came into effect in accordance with the United Nations Convention on the Rights of Persons with Disabilities (2016) and was followed by amendments in 2017. New Education Policy (NEP2019) has also reinforced the concept of Inclusive Education through Curriculum modification and home schooling, if need be. National Centre for Promotion of Employment of Disabled People (NCPEDP) has given inputs for including more strategies in the NEP 2019 to enhance Participation of the Divyangjan in the social fabric as per UNCRPD to which India is a signatory.

Accessibility of education, invariably, begins with disabled-friendly infrastructure, be it barrier free classrooms, ramps, washrooms or library facilities. Also disability friendly supporting services recommended by the UGC like computer software, books in Braille, appropriate desks and chairs etc should be made available. Use of ICT and providing supporting device like sign language interpreter facility for hearing-impaired students must be added. Availability of devices such as computers with screen reading software, low-vision aids, scanners, mobility devices, etc., in the institutes would enrich the educational experiences of differently-abled persons. UGC is providing special grants to the universities for providing special assistant devices and supporting services to these students. Strict implementation and monitoring of all these supporting services in all higher education institutions will ensure an increase in enrolment and retention of these stakeholders. Moreover, in an effective inclusive programme, teachers must adopt strategies and pedagogical innovations to include all students, even though their individual goals may be different.

Skill-based courses, especially designed for people with disability will also lead to the realisation of Sustainable Development Goal (SDG) 10 that only social, economic and political inclusion of these

students will bring a tangible change in the society. The National Institute for the Empowerment of Persons with Visual Disablties (Divyangjan) is a premier Institute in the field of visual disability working under the administrative control of Ministry of Social Justice and Empowerment, Government of India. It produces trained manpower for providing quality education, vocational training and rehabilitation services to the visually impaired persons. It aims at promoting rights and dignity of persons with visual impairments and has trained manpower for providing quality education, vocational training and rehabilitation services to the visually impaired persons. As part of its research and developmental activities a number of useful tools and enabling technologies for equal participation by the visually impaired persons have been developed. This Institute remains the largest producer and distributor of Braille literature and devices in the country including talking books.

Enabling units and Equal Opportunities Policy in the institutions of higher learning can assist differently-abled students to gain training and, subsequently, successful employment in the public as well as private sectors. They must ensure necessary support, individualised or otherwise, in environments that maximise academic and social development consistent with the goal of full inclusion.

Conclusion

It is pertinent to mention that integrating the needs and considerations of People With Disability is imperative while framing the Govt policies to ensure holistic development of the society. Each individual is a vital human resource and the no socio-political or economic system can afford to lose sight of this hitherto marginalised section.

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Role of Computational Chemistry in Higher Education

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The 21st century is an era of computers since computer technology has become the backbone for the advancement of every field. Such technologies find their application in various areas of higher education and lead to the development of business, pharmacy, engineering, defense, transportation and many more. In a similar manner, Computational Chemistry which is a branch of science uses computer simulations to assists in solving problems related not only to chemistry but to biology and physics also. It uses methods and ideas of theoretical chemistry incorporated into efficient computer programs to compute the structure and properties of molecules. The fundamental properties of atoms, molecules, ions, and chemical reactions can be found out using tools of computational chemistry, which are the basic need of every branch of science and technology. This field of chemistry paves new directions to the experimentalist. Without putting hundreds of trail reactions in the synthesis lab, the computational chemist can predict the most suitable reaction conditions as well as the structure of the desired product, thus it adds towards the efficient synthesis of novel compounds. The best correlation between molecular structure and properties/ activities of compounds can be obtained through the techniques of computational chemistry and this application is widely employed in the drug-designing. The design of safer drugs and prediction of their efficiency is routinely practiced using in-silico (experiment performed by means of computer modeling) tools as compared to in-vivo (experiment performed in a living organism) techniques. In addition to this, it also plays a critical role in the improvement of properties of matter at micro as well as macro-level so as the application of different matters in different areas can be more elaborated. Thus the computational chemistry has a great impact on developing the 'Green Chemistry - need of today' and gives its full contribution towards Saving Environment as it provides benchmark alternatives for the hazardous experiments. Therefore computational chemistry must be popularized for the standardization of higher education.

Keywords: *Computational chemistry, Higher education, Economy and Sustainable development.*

Abstract

Introduction

Computational chemistry[1] holds an important responsibility in the advancement of higher education as it meets the demand of chemists to solve complicated societal problems using the computers. One of the most concerned societal problems is the impact of various chemicals to which we are exposed in our day to day life on human health. These chemicals include pollutants, pesticides, cosmetics, and daycare products, etc. Through computational chemistry biological activity, physicochemical properties, toxicological properties, etc. of chemicals can be modeled and predicted without the experimental aids. For this purpose Quantitative structure-activity, relationship[2] (QSAR) models are developed computationally. A QSAR model attempts to relate the structure of chemicals with its biological activity. Such models can be utilized by Regulatory authorities for the regularization and management of chemicals. Since the whole of the matter is made up of atoms and molecules, thus all the physical or chemical changes of the matter are associated with the changes at the atomic level. Computational chemistry is the only tool that can explore the phenomenon occurring in the whole universe at the atomic level just by sitting next to the computer. It can lead to the students to learn the chemical phenomenon at the atomic level.

In our day to day life, we are exposed to a number of chemicals in one or another form. Most of the chemicals have a dangerous impact on our health. Therefore a check on such chemicals is necessary.

For the development of QSAR models various computational and statistical software are being employed. Gaussian[3], Mopac[4], HyperChem[5], AutoDock[6,] etc. are few routinely employed computational software packages for calculating properties of chemicals in mathematical form whereas SPSS[7], Minitab[8], QSARINS[9,] etc are different statistical software employed for the development of QSAR models. In addition to this, while developing QSAR model experimental data is required about the biological activity of a particular chemical. The most commonly explored databases for this purpose are ECOTOX, PUBCHEM, CHEMBASE, DRUG BANK, PDB, etc.

This review paper attempts to highlight the role of computational chemistry in higher education and a few examples where the tools of computational chemistry are employed to investigate the biological activities by a different group of scientists. Through the improved ICT methods and with the exposure of this field among the students whether graduate/postgraduate/researchers use chemicals with hazardous properties can be managed and chemicals with less hazardous properties can be designed.

Historical perspective of modeling biological activity of chemicals

Literature available supports the fact that tools of computational technologies are explored by a different group of scientists for modeling biological activity of chemicals. Modeling the mutagenicity/ carcinogenicity and ADMET (*absorption, distribution, metabolism, excretion, and toxicity*) of chemicals is a major concern nowadays and various computational chemistry based QSAR models are developed taking different structural aspects of chemicals into consideration[10-12]. Drug discovery often involves the use of QSAR, to identify chemical structures that could have good inhibitory effects on specific targets, and have low toxicity (non-specific activity)[13]. Mechanistic details of protein-target relationships are studied with more accuracy computationally[14]. Along with the simulation studies, this branch of science can be explored for risk assessment of chemicals.

Computational chemistry: Economy & Sustainable Development of Nation

Since computational chemistry employs only computational methods for the investigation of activity of chemicals, therefore, it plays significant role in strengthening of economy of nation while experimental determination of chemical's activity lots of money is being utilized in the form of cost of chemicals, analysis procedure, safety tools, establishment of experimental laboratory, etc. whereas with the expanded use

and application of new computational technology this cost can be reduced to the half of the experimental cost because here researcher requires only computers and some particular software. Furthermore, there is no need for running hundred of experimental trials for accessing biological activity under different conditions. This can be done more accurately and with a wide range of variations computationally. Thus the cost of running lots of experiments is omitted by advanced technology. Moreover, the most important advantage of computational techniques is it can produce results in lesser time as compared to experimental determination.

For more accuracy and precision in results with a lesser time limit, good quality of hardware and software is required. This demand is fulfilled by the advancement in computer science which is an important pillar of the higher education system. It has increased the speed of computers 100-fold and at the same time led to a significant reduction in hardware cost.

The world can be changed for better by bringing together respective government, media, business and institution of higher education. Providing quality education and innovation in research is one of the major goals of sustainable development. Computational chemistry strongly focuses on these two factors. Methodologies developed in this field of research remain for the years and new researchers can modify the methods by incorporating different structural information of chemicals for improved results of methodology. Great knowledge of computer hardware and software systems is necessary for running the calculations computationally. This led to the sustainable development of any country as the more educated people who are capable of are the product of this area of research

Future of Computational Chemistry in Higher Education

There exists a strong correlation between computer science and computational chemistry. Computer scientist puts their efforts for developing and validating hardware, algorithm and data software, and visualization tools. On the other hand computational chemist employs these tools for modeling, simulation, and data analysis.

For the understanding of phenomenon occurring in the world, a more productive manufacturing process, designing of new compounds and their characterization, etc. methodologies of computational chemistry are explored. Thus this area of research finds its great application in higher education. Furthermore, it requires a solid background in the basic principles of chemistry and computers for applying computational tools effectively and performing a useful analysis of obtained results.

In addition to this computation,the chemist has a great workspace in any field of research. They have a good opportunity to get employed in companies and industries like pharmaceuticals, petroleum, data analysis, etc. and education departments as well. A report by the U.S. Bureau of Labs and Statics shows that there is a tremendous increase in a number of computational scientists between 2012 (26,700 jobs) and 2020 (30,800 jobs). Thus the popularization of computational chemistry in higher education can lead to the development of a nation.

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Nutrient (Iodine) deficiency: A Hindrance to Scholastic Performance and Quality Higher Education

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Abstract

Nutritional deficiency is one of the major factors that can affect the academic performance of school children and further decrease the prospects of going for higher education. The main aim of this study was to determine the association between iodine deficiency disorder and academic performance among school-age children which may have an impact on quality education and higher education. The school-based cross-sectional survey was conducted in the Udaipur district, Rajasthan. A total of 2329 students, aged 6-12 years, were selected from primary schools using a systematic random sampling method. Goiter examinations and urine iodine test was done to diagnose goiter. Spot urine samples were collected to determine the median urinary iodine level and anthropometric measurements were done. In this study, 1,693 children were included for assessment of academic performance. The academic score of students for nearly 20 percent of the subjects was found to be less than 60 percent. Academic performance of the non-goitrous subjects as well as having normal urinary iodine excretion was found to be better goitrous or iodine-deficient subjects; although the results were not statistically significant. The present study revealed that iodine deficiency goiter is a significant health problem among school-age children in the study area. Hypothyroidism due to iodine deficiency reduces physical growth and retards learning capacity. Physical development has a significant association with learning, suggesting the importance of nutrition in the education system.

Keywords: Goiter, Iodine Deficiency, Academic Performance, Quality Enhancement, Higher Education

Introduction

Malnutrition has adverse effects on the growth and development of children. Studies also show that undernourished school children have inferior intellectual performance as compared to well-nourished children. Iodine deficiency is known to be the most common preventable cause of mental retardation; it impedes children's learning ability as well. It is now known that hypothyroid children are intellectually subnormal and also suffer from a physical impairment. Hypothyroid fetuses often perish in the womb and are often incapable of completing school. Studies have documented that in areas with an incidence of mild to moderate IDD, IQs of school children are on an average 13 points below those of children living in an area where there is no iodine defficiency (Bleichrodt and Born,1994). The results of

the studyconducted by Mehta *et al.* (1987) on 60 goitrous school-going childrenin the age group of 6-16 years belonging to two severely iodine-deficientvillages showed that 70% of the children had IQ scores below normal.Besides the impairment of psychomotor retardation and poor abstractability, these children showed significant impairment of motor coordination.School performance to assess mental performance although it has a number of limitations such as school performance greatly depends on theinterest of the student, teaching institution, preference towardseducation, family background, economic strata, etc. IQ in the presentstudy was not assessed as it is also affected by many other confoundingfactors & variables. In addition, it is difficult to point out iodinedeficiency as the major cause of low IQ. Also, no suitable tests for assessing mental deficiency particularly due to iodine deficiency areavailable. Moreover, it has been reported that approximately 70 percentof whole India is being supplied iodised salt under the policy ofuniversal salt iodization (Ramalingaswami et al 2000) and thus controls.e. children not taking iodine in the diet was difficult, to identify. Therefore, in the present study school performance although havinga number of limitations as explained above was used forcorrelating scholastic (mental) performance with that of iodine deficiency parameters.

Methodology

The present investigation entitled Status of Iodine deficiency disorders in urban school-going children of Udaipur city, Rajasthan was carried out to assess the relationship of iodine deficiency with that of scholastic performance. A total of 2329 urban school-going children in the age group of 6-12 years were selected from 10 schools situated in the five directional zones using a stratified multistage sampling method. Data collection was done using a pre-tested structured questionnaire. The iodine deficiency disorders were assessed by using standardized: clinical i.e. thyroid enlargement and biochemical indicator i.e. urinary iodine excretion levels. The effect of iodine deficiency on scholastic performance was assessed by the total marks or percentage obtained in the previous academic year. The school performance of children was collected as to total aggregateor total percentage by which they were promoted to the next class. For eg.if the present selected subject is in class V, subjects previous yearperformance or percentage obtained in class IV was noted from the schoolrecords. The school performance was classified as described below:

Table 1 Classification of class performance

Percent marks	Criteria
> 80	Excellent
70-80	Very good
60-70	Good
50-60	Fair
< 50	Poor performance

Results

Out of the total (2329) children, nearly 60 percent were males and 40 percent were females. In the present study, the total goitre rate (sum of grade I & II) was found to be 8.4 percent, which according to WHO/ICCIDD/UNICEF (1994) is categorised as a mild deficiency. The prevalence of goitre was higher in females (10.9 %) compared to males (6.8 %). The visible goitre rate (goitre grade II) in the present study population was 0.7 percent. This Prevalence was also high in females (0.6 %) and less in males (0.1 %). The prevalence of goitre showed an increasing trend with the increase in age, being highest (2.0 %) in 11 years age group and least in 6 years (0.3%). Chi-square test revealed a significant association of goitre with age ($p<0.01$). The prevalence of iodine deficiency disorders by urinary iodine excretion levels i.e. a biochemical indicator for the assessment of iodine deficiency disorders revealed that more than 90 percent of subjects were showing urinary iodine excretion levels more than 10 mcg/dl. However, 8.4

percent of children showed low urinary iodine excretion levels i.e. less than 10 mg/dl. Only a single case of severe biochemical deficiency « 2 mcg/dl) was found. Iodine deficiency in male and female children was nearly the same i.e. 8.3 and 8.4 percent respectively.

The information for scholastic performance was available for 1694 subjects. The scholastic performance as a percentage of marks was categorized as <50, 50-60, 60-70, 70-80 and 80 and above indicating poor, fair, good, very good and excellent performance respectively. Table 2 shows that more than 80 percent of the subjects were having good academic performance as their aggregate marks were more than 60 percent. However, nearly 6 percent of the subjects were found to have poor academic performance as they secured less than 50 percent of marks in the previous academic year.

Table 2 Distribution of subjects on the basis of academic performance

Percentage of marks	Categories	Subject
>80	Excellent	38.1 (645)
70 - 80	Very good	25.0 (423)
60 - 70	Good	17.5(297)
50- 60	Fair	13.6 (230)
<50	Poor	5.8 (98)

The class performance of the goitrous was less in all the categories as compared to normal or non-goitrous children except that for the category of 70-80 percent marks (Table 3). The difference in the class performance of goitrous and non-goitrous was not significant ($p > 0.05$).

Table 3 Distribution of subjects class performance according to goitre grade

PERCENTAGE OF MARKS	CATEGORIES	MEAN % ACCORDING TO GOITRE GRADE	
		GRADE 0	GRADE 1
>80	EXCELLENT	88.1±4.9 (596)	86.5±4.6 (46)
70 - 80	VERY GOOD	74.6±3.2 (392)	7.9±3.4 (31)
60 -70	GOOD	64.4±2.9 (269)	64.2±2.7 (28)
50 -60	FAIR	54.7±2.8 (213)	54.5±2.6 (17)
< 50	POOR	42.2±7.3 (86)	41.3±5.3 (12)

Also, it is evident from the table that as the median urinary iodine levels are increasing the mean class performance of the subjects is also increasing suggesting a positive correlation between iodine excretion levels and scholastic performance.

Table 4 Mean class performance of subjects according to median urinary iodine excretion levels

URINARY IODINE EXCRETION (mcg/dl)	NUMBER OF SUBJECTS	MEAN CLASS PERFORMANCE
< 2	1	--
2 - 4.9	2	65.05
5 – 9.9	14	69.73
>10.0	209	73.04

Discussion

Many studies are also clearly are of the view of the association between nutrient deficiency and decreased scholastic performance. Few studies which have corroborated the relationship include a study conducted by Dodd and Samuel (1993) in which scholastic performance was assessed by the average marks obtained in the last examination revealed that the scholastic performance of the adolescents with goitre was poor. Also, 48 percent of subjects obtained less than 50 percent marks and their academic grades showed a significant association with thyroid stimulating hormone levels. A study by Tiwari et al. (1996) to assess learning disabilities and poor motivation to achieve due to prolonged iodine deficiency revealed that severe iodine-deficient children were slow learners and scored significantly lower scores on achievement motivation scale as compared to mildly iodine deficient. Sankar et al. (1994) reported that " majority (more than 80 percent) of the children belonging to the iodine-deficient area had significant impairment in language, meaningful memory, non-meaningful memory, conceptual thinking, numerical reasoning, and motor skills.

Conclusion

The study suggested that the presence of goitre has a negative effect on academic achievement. The scholastic performance assessed by total marks or percentage depicted suggestive trends and correlation between scholastic performance and amongst iodine-deficient respondents both by Clinical assessment(goitre assessment) and biochemical assessment (median urinary iodine excretion).The present study revealed that iodine deficiency goiter is a significant health problem among school-age children in the study area. Goitre Hypothyroidism due to iodine deficiency reduces physical growth and retards learning capacity. Physical developmenthas a significant association with learning, suggesting the importance of nutrition in the education system. Undernutrition causes poor motor development and subsequent low activity levels. It also causes apathy and lack of interest in the environment. Another possible mechanism is that undernutrition may have a direct effect on the children's central nervous system. Thus it is clearly evident that nutrient deficiency will directly have an effect on school performance which is directly related to higher education particularly quality higher education. Furthermore, the importance of nutrition in all spheres of growth and development, education and knowledge should be highlighted and managed to achieve a quality enhancement in education so as to contribute effectively for the development of the individual, family, society, and nation at large.

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Issues within the
Higher Education System of India

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Abstract

Higher education comprises all post-secondary education, training and research guidance at educational institutions such as universities that are authorized as institutions of higher education by state authorities. (UNESCO). Higher education plays an important role in the country's overall development. India's higher education system is the world's third-largest in terms of students, next to China and the United States. Though the higher education system has been facing many issues, still some steps can be taken to overcome these issues to make it a much better system. The aim of higher education has to be set for fulfilling the aspiration and learning requirements of the students by developing their intellect which will accompany them throughout their lives. It should be focussed on making the individuals capable enough to use their talent and knowledge for self-fulfillment and serving the society as well. In a vastly populated country like India, a large no of students take higher education at colleges and universities which collectively sums up a rough figure of more than 12000 existing higher educational institutions. The review paper has been written after doing extremely focused study pertaining to the problems behind the issues like poverty, unemployment, lack of education and various other situational issues which abide by the scenario of our country today. The aim of this review paper is to mainly highlight the emerging issues in the sphere of the higher education system in India. The methodology opted for is of descriptive nature. Various journals were studied and analyzed for the presentation of this review paper. Finally, the paper concludes the need fora plan that requires solutions that should be focused on making the individuals capable enough to use their talent and knowledge for self-fulfillment and serving the society and also training future leaders for any life discipline, be it professional or public.

Introduction

Higher education in our country can never be a nation-building block unless the understanding of people opting for higher education is brought at par with the thinking mechanism of intellectual individuals. Most of the younger generation coming out of high school and opting for higher education are rarely bothered about taking up the next level of their education for serving the country and contributing to society, instead, they are much interested in taking up a job with heavy emoluments after completion of their studies. With the increasing influence of politics and decreasing standards of imparted education, the higher study institutions have now become a product manufacturer for serving industries. Apart

from the basic objective discussed above the higher education should plant democratic idealism among the learners and teach them to opt for higher values of life. The central aim of higher education should be training future leaders for any life discipline, be it professional or public.

Objectives

1) To analyse the various issues regarding the higher education system.

2) Suggest and emphasize few points for improving the quality of higher education.

Methodology

The methodology opted for is of descriptive nature. Various write-ups and journals were studied and analyzed for the presentation of this review paper.

Issues

1) **Teaching quality:** The first and foremost issue that contributes towards good/better/bad higher education is the teaching quality which again depends on the quality of faculty /teachers appointed to teach the students. For teachers to impart knowledge to the students, they must have a broad knowledge base of the subject matter as well as enthusiasm and desire for learning throughout the course of their careers. There are many universities in our country, but very few of them are considered to have faculty of high standards. In this context, the national education policy draft by TSR Subramanian makes some very serious observations and recommendations. According to the report "the quality of many universities and colleges and standard of education they provide are far from satisfactory"

2) **Financing and privatization:** Although India is already spending a lot on this field and can't spend more. However, if the quality of higher education has to be improved then more finance is required to be poured in. Due to financial implications Govt. aided institutions lack the type of infrastructure and good academic record as compared to the private institutes. Private institutes have flourished like mushrooms today, providing namesake education at higher prices and making money from the students and parents who could not come up in merit for admissions to govt universities.

3) **Lack of Moral values:** Rapid growth of science and technology and subsequent industrialization has caused great danger to our old morals and values. The younger generation's dissatisfaction and revolt are the outcomes of a decaying system of values.

4) **Traditional methods of teaching:** Professors still stick to those conventional methods of teaching like board, marker. They don't like to make use of audiovisual aids in as they are not used to new patterns of teaching technology. Also, they are not up to date with the information available like what are the global industry demands in their field of expertise.

5) **Inadequate facilities and infrastructure:** In India, many of the universities don't have adequate infrastructure or facilities to teach students. Few universities are even operational without classrooms. Internet and Wi-Fi facilities are still not reachable for many students.

6) **Low-quality education of institutes:** Abundance of low quality privately owned educational institutes all over the country is a major challenge in the field of higher education. These private institutions being a profit-making body are focussed on fleecing money from the students. They take anti advantage of limited admission capacity of govt universities. The teachers appointed here are on tiny wages and in turn with limited bookish knowledge.

7) **No strategy:** Lack of strategy is witnessed in India at the end of both students and Govt. The majority of the students do not reflect their field of interest for further studies. They are encouraged to take up the streams that make a higher number of Jobs or pay levels rather than their field of interest.

The best students opt for well-established institutes like IITs and AIIMs and rest are left with govt institutions. In a major strategical change the recent draft UGC regulations sent to the universities, it was suggested that 50 top universities of the country will be required to reserve 20 % of faculty positions for foreign faculties and that too for longer contract periods. (Mukhtar Ahmad 08 Feb 2019 university world news)

8) **Political interference:** Most of the educational institutions are owned by the political leaders, who are playing a key role in governing bodies of the Universities. They are using the innocent students for their selfish means. Students get busy in organizing political campaigns leaving behind their own objectives.

9) **Faculty:** Faculty shortages and the inability of the state educational system to attract and retain well-qualified teachers have been posing a challenge to quality education for many years. Large numbers of NET / Ph.D. candidates are unemployed even when there are a lot of vacancies in higher education, these deserving candidates are then bound to apply in departments rather than their field of expertise, which again is a blow to the higher education system.

10) **Structure of higher education:** Management of Indian education faces challenges of over-centralization, bureaucratic structures and lack of accountability, transparency, and professionalism. As a result of the increase in the number of affiliated colleges and students, the burden of administrative functions of universities has significantly increased and the core focus on academics and research is diluted (Kumar, 2015)

Suggestions for Improving the System of Higher Education:

• There is a need to implement innovative and transformational approaches form primary to higher education levels to make the Indian educational system globally more relevant and competitive.

• Higher educational institutes need to improve quality and reputation.

• High-tech Libraries- A library must be online and conducive for serious study. Indian universities should concentrate more on providing quality education which is comparable to that of international standards.

• There should be a good infrastructure of colleges and universities to attract the students.

• The government must promote collaboration between Indian higher education institutes and top International institutes for better quality and collaborative research

• Universities and colleges in both public-private must be away from the political affiliations,

• Favoritism, money-making process should be out of the education system, etc

• There should be a multidisciplinary approach in higher education so that student's knowledge may not be restricted only up to their own subjects.

Conclusion

Today India boasts of having the highest population of young individuals, but individuals accredited with a better higher education that engraves in it the social and moral values will be bestowed as a blessing to the country. The need for the hour is to decrease the influence of politics and increase the standards of imparted education along with addressing other issues, which can certainly take up the higher education system and our country to a higher level.

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Influence of Higher Education on Parenting Practices

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Abstract

Parenting is not just about a set of rules to follow a happy, well-adjusted life. Good parenting aims at socializing children. Parenting brings many responsibilities and difficult decision making. But it has been noticed that nowadays due to a busy life-scheduled parents are unaware of what kind of parenting they should provide, they are unaware of the consequences of providing the right amount of love, kindness and caring. Parents who approach good parenting their home environment are also good, as well as they, don't force their children to choose their education according to them. The present study was conducted to gain insight into the effects of higher education on parenting.This paper tells that parents are not able to help their children to choose their future as they remain busy in their own life they don't have time to look for their child, even parents' academic achievement also affects the child's career. Parents who belong to lower strata, they have different perception about higher education as compare to parents who are educated. Parent's mentality towards higher education is that they do not give equal chance to every child to come forward as well politics is also becoming one of the factors due to which college-going students remain tensed and depressed. Due to this all unawareness related to the effects of higher education on parenting there is a need for vast change in this area.

Keywords*Higher Education, Parenting, Good Parenting, Effects of Higher Education Parenting.*

Introduction

Parenting is all about the set of rules and regulations to foster good development of the child. An appropriate amount of love is good if provided in a good way. Parents are the ones who help the child to learn about the various things related to their life, they help their child in walking, eating, sleeping as well in the holistic development of the child. But it has been noticed due to busy life, many parents are not able to concentrate what is happening in the life of their child which leads to excessive struggle in later life of the child when they go for higher studies. Parents do not think about the consequences of ignorance in their child's life, later they realize when everything is over. Various studies have also shown that parents are not aware of the facts that what is happening in the life of their child, moreover they do not have the will to ask their child about the whole day and they do not help their child for what to choose in education when it comes to career. Despite this,parent's education also affects the academic achievement and career path of college students. If parents are less educated or not educated they remain confused because they do not realize what the child is suffering through. There is no doubt that parents

are the primary part of their child's lives, parents who have gone to colleges or postgraduate they are more focused on their child's academic achievement as well in a career like giving them direction what to choose beyond for better earning and good post. Many findings show that students whose parents did not hold a degree, they forcefully marriage the child without realizing its later consequences. Especially in rural areas, females did not get a chance to study further because they belong to a low-status family and their parents think that educating females is a sin. According to these various consequences, there is a big requirement for change in parental attitude towards higher education, parents belonging to high status as well as low status they should give awareness through many seminars and workshops about the importance of higher education towards their child's life. It has also noticed that many colleges and universities put so many burdens on the life of the child which will lead to the death of a child as they remain tensed or depressed. In higher education, it is also noticed that many universities charge a lot from students which parents cannot afford like if any function is organized in the colleges than they charged this type of grants from students which is very wrong, children come to colleges for knowledge not to give unnecessary funds to colleges. But are the colleges giving appropriate knowledge to children or they just earning good amounts of funds from students, it has also noticed that politics is also becoming the main cause in higher education, like the child who is not good in study they do not give a chance to come further and if they are low in confidence they not get an opportunity to come further so according to this all effects of higher education, there is need for big change in higher education so the future of child is in right hand moreover students should not think that taking education is just they are wasting their time if they do not get appropriate knowledge.Researches show that parents have a great influence on a child's achievement. Report prepared by the National Parent Teacher Association (PTA), when parents are involved regardless of income or background, students are more likely to higher grades and test scores, enroll in higher education programs, attend colleges regularly, have better social skills, show improved behavior graduate, and go on post-secondary education. The PTA, Working with leading experts on parental involvement, developed and recently updated their sex national standards that help the parents on what parents, colleges, supporting student's success. Moreover, as a result,the strong-parent-colleges partnership is increased parent involvement at home. Two key practices that are used about supportive learning first inculcate the value of learning and secondly express high but realistic expectations for achievement. Students are the star of our nation to facilitate students with proper education has been a major problem for decades. The environment and personal characteristics of students play a significant role in their academic success. Factors and determinants of academic success achievement of students have been subject tothe ongoing debate among researchers. Most of the researchers are focused on the input and output relationship of students. Yet, very little is proven about the various factors contributing to student's success. Additionally, in the discussion about the determinants of students' academic performances, only little heed is paid to student's time allocation, parental involvement, teacher's behavior, university's education system (semester or annual system), mental and physical health, the medium of instruction, exposure to latest technology student's aptitude.Looking explicitly at student's time allocation, little evidence is available. Barabaras. S. Grave (2010) came up with the findings that the time spent on courses is positively correlated with students' success. He further opined that devoting time to self-study is positively associated with grades and after attending lectures in universities, students should do self-study in homes for improvement of grades. The need of the time is the proper time table and time management for studies.Shafqat Ali Shah's (2009) study revealed that teacher's behaviour towards their students directly affects their academic success. Higher the positive teacher's behaviour towards students, the higher the student's academic achievements. Important qualities in teachers' behaviour are punctuality, honesty, hardworking, competency and confidence. He described that teacher's frankness with students, strict moody aggressive attitude, non-punctuality, lesser of will power are factors contributing directly to the performances of the students. Hassan Danial

Aslam et al. (2012) conducted a study to find out which system of education provides quality learning and academic excellence for university students. He explained that due to flexibility in the environment of the semester system, students learn more as compared to the annual system. In semester system burden of studies is less as compared to the annual system and students have more opportunities of scoring better grades in a semester than the annual system.Murray (1938) described achievement motivation as a desire to accomplish something difficult, to overcome obstacles and attain a high standard, to excel oneself. Parent's education influences parent's skills, values, and knowledge of the educational system, which, in turn, influences their educational practices at home. Parents with more education talk and use more varied languages that influence the language skill of the child (Hoff, 2003). Parents with more education also have a higher expectation for their children's education which facilitates the greater educational attainment for their children (Alexander, Entwisle&, Bedinger, 1994). Well educated parents have involved more in their children's education than less-educated parents. (Grolnick&Slowiaczek, 1994; Stevenson & Baker, 1997) Such parental involvement in children's education is fruitful. The more actively involved parents are in their children's education, the higher their children's perceptions of competence and the better they perform in school and enhance their achievement motivation. Study named as "The Influence of Parent Education and Family Income on Child Achievement" in this study it is mentioned that the income of the family directly affects the child education as well as their behaviour in later life so there is a need that government should take various steps to help the parents who belong to low strata so that their child aspirations is also accomplished.

Conclusion

According to this all effects of higher education on parenting, it is concluded that colleges and universities should not pressurize the students which are leading to the death of the college students, moreover, parental attitude should be improved if colleges will focus on providing right amount of education without wasting time on unnecessary things, they should give chance to every student whether they are belonging to any religion or any status. Parents belonging to rural areas who do not have sufficient income to send their child to schools or colleges, so far them government should take some steps like free of cost education should be provided to them for better development of the child's future. Parents should also change their mentality towards higher education and they should also give proper time, guidance, nurturance to their children.

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Impact of parents on student success [Blog post]. Retrieved from https://inclusiveschools.org/impact-of-parents-on-student-success/

Women Empowerment through Higher Education

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Abstract

India holds the second position in the world of having the highest population. There are approximately 49% female in a total population of it. But if we analyze the current status of Indian women with other countries of the world than we can realise that the scene is not even satisfactory but the worst. Indian women generally faced all types of barriers to success like illiteracy,domestic violence, lack of motivation and support and many more. India is a country where man dominance in the society prevails, the society cannot function without the active contribution of women but in the majority of the rural (in some cases, even urban) parts of India, Indian women are still considered to be incapable of taking independent decisions. It is very essential for the harmonious development of the country that women should go hand by hand and shoulder to shoulder with men. And for empowering the women, the society cannot function without the active contribution of women but in the majority of the rural (in some cases, even urban) parts of India, Indian women are still considered to be incapable of taking independent decisions.

Introduction

Higher education will play a vital role. Higher education is the gateway to economic security and opportunity particularly for women in India. Women are part of the socio-economic system and they uphold rich cultural and traditional values. Their progress is equated with the progress of the nation. From 2000, many Indian women play a major role in Knowledge Societies as leaders, addressing issues on creating and adapting information and ideas at an accelerating speed to support economic growth and improved quality of life in India addressing issues such as Equity, Quality, Relevance, and Access, proving that Indian women with any background becomes a contributing member of society through learning. The Indian Government has introduced policies and procedures with the goal of sensitizing the higher education system, recognize gender equity and increasing the number of women enrolling for higher education. Higher education for women in India has witnessed impressive growth over the years and the Government is pooling resources needed to promote female education at all levels.

Women's Empowerment: Gender discrimination has been a major obstacle in granting an equal opportunity for women in Higher Education. It has been identified as a crucial category and deserves attention in the education-equality paradigm. Today, women's education has become an issue of debate within which it is now necessary to shift the focus from women's intellectual development to women's autonomy in decision-making, freedom of expression and control over resources. Empowerment is the manifestation of a redistribution of power that challenges patriarchal ideology, transforming the

institutions that reinforce or perpetuate gender discrimination. The parameters of empowerment have been identified as 1. Developing ability for critical thinking; 2. Fostering decision-making and action through collective processes; 3. Ensuring equal participation in developmental processes; 4. Enhancing self-esteem and self-confidence in women.

Meaning of Higher Education: Higher Education is the aggregate of systematized knowledge and practical skills that allow theoretical and practical problems to be solved by a given type of training, utilizing and creatively developing the modern achievements of science, technology, and culture. The term "higher education" is also applied to the training of highly skilled specialists in the fields of economics, science, technology, and culture at various types of higher schools, which accept personswho have successfully completed secondary general-education schools or secondary specialized-education institutions.

Need for Women Empowerment

1. Empowerment is probably the totality of the following or similar capabilities:

2. Having decision-making power of their own

3. Having access to information and resources for taking proper decision

4. Having a range of options from which you can make choices (not just yes/no, either/or.)

5. Ability to exercise assertiveness in collective decision making

6. Having positive thinking on the ability to make change

7. Ability to learn skills for improving one's personal or group power.

8. Ability to change others' perceptions by democratic means.

9. Involving in the growth process and changes that are never-ending and self-initiated

Hindrance of Women Empowerment & in Higher Education

There are many hindrances in the path of women empowerment and in higher education. Some of them are as follows-

1. Lack of education

2. Financial constraints

3. Family responsibility

4. Low mobility

5. Low ability to bear the risk

6. Low need for Achievement

7. Absence of Ambitions for the Achievement

8. Social status

9. Violence is one prime factor that opposes women's empowerment.

10. Financial constraints from govt. and also from other organizations.

11. Low need for achievement to get higher education among women in the rural sector.

12. Removal of gender inequality from our orthodox society.

13. Women should actively participate in all social and political changes in our country.

14. Eliminating all forms of discrimination in education and employment.

15. A remarkable and strategic change is necessary for national media, to change the attitude of people toward women's education.

16. Preventing early marriages in our country.

17. Women should contribute effectively to the socio-economic development of the nation 18.Introduction of satellite schools for remote areas of our country.

19. Encourage the use of ICT and the internet for the study by women.

Role of the Indian government in women empowerment

After independence, various commissions and committees set up in India advocated its need for gender parity in all the stages of education. Kothari's commission and the national policy on education and the programme of Action in 1992 put enormous emphasis on the promotion of gender equity in education by reducing the gender gap in access, retention, and transition from one stage to another. The national policy on education stressed that education will be used as an agent of basic change in the status of women. In order to neutralized the accumulated disadvantages of the past. The national policy for the empowerment of women has been a remarkable achievement for women. The year 2001 was celebrated as a women's empowerment year, which recognized women as agents of socio-economic change and development in the country.Indian Government continues to encourage higher education for women through programmes like, Indira Gandhi scholarship for single girl children for pursuing higher and in order to support higher education through scholarships and by constructing women hostels and by capacity building for women managers in higher education.The Ministry for Women & Child Development was established as a department of the Ministry of Human Resource Development in the year 1985 to drive the holistic development of women and children in the country. In 2006 this department was given the status of a Ministry, with the powers to formulate plans, policies and programs; enacts/amends legislation, guiding and co-coordinating the efforts of both governmental and non-governmental organizations working in the field of Women and Child Development. It delivers such initiatives such as the Integrated ChildDevelopment Services (ICDS) which is a package of services such as supplementary nutrition, health check-ups, and immunization. As mentioned earlier, the empowerment of women begins with their safety and health and this Ministry is committed to providing them.

Conclusion

Women Education is a powerful tool for change of position in society. Higher education functions as a means of improving the status of women in the family and society. Education is the only tool for empowering women. The government of India should come forward to taking initiative regarding women empowerment and also there should be a proper implementation of those initiatives. it is also mandatory that there should proper implementations of what policies are made and what government of India has made different programmes regarding women empowerment.

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Role of Information and Communication Technology (ICT) in Transforming Higher Education

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Abstract

Education is an important key for awakening not only in India but in any country. It also acts as an instrument for economic and social transformation. Higher education is the mother of all professions. Information and Communication Technology (ICT) plays a very important role in today's teaching-learning process, especially in higher education. The introduction of ICT in higher education has a great impact on the whole education process. The role of ICT in higher education not only improves classroom teaching but also prepare the next generation for enhancing the earning potential, seeking and advancing knowledge and wisdom, and also research and experimentation. At the same time due to the dispersion of ICT in higher education system presents challenges for colleges as well as universities. This paper highlights the impact of ICT, the role of ICT, initiatives, advantages, and challenges of ICT in higher education.

***Keywords:** Information and Communication Technology, Higher Education, ICT initiatives*

Introduction

According to Nelson Mandela, "Education is one of the most powerful weapons which you can use to change the world." Infact, education is one of the necessities for man after food, clothing, and shelter. In today's competitive world, it not only widens the depth of one's knowledge but also raises awareness of one's societal rights and responsibilities. There is a direct co-relation between education and socio-economic development in any country and with India being a young developing nation, educational wealth becomes pivotal for its success (Bajwa, 2009). Higher education has been rightly defined as the mother of all professions. The people in college and university education shape the behavior, minds, and the social and human values of the student community. The efficient use of technology can motivate students; make the classes more energetic and interesting as they learn new skills and techniques.

Impact of ICT on Education: The impact of ICT across the past two or three decades has been enormous in different fields such as medicine, tourism, travel, business, law, banking, engineering, and architecture. But when one looks at education, there seems to have been an uncanny lack of influence and far less change than other fields have experienced. The purpose of ICT in education is generally to familiarize students with the use and workings of computers and related social and ethical issues.

ICT has become an essential part of today's teaching-learning process. Information and Communication Technology (ICT) is a force that has changed many aspects of one's life. ICT is defined as a "diverse set

of technological tools and resources used to communicate, and to create, disseminate, store, and manage information" (https://en.wikibooks.org/wiki/ICT_in_Education).

In the current information society, people have to access knowledge via ICT to keep pace with the latest developments. In such a scenario, higher education always plays a critical role in any economic and social growth of a country. Higher Education not only increases the productive skills of the individual but also his/her earning power. It gives them a sense of well being as well as the capacity to absorb new ideas, increases their social interaction, gives access to improved health and provides several more intangible benefits (Bhattacharya and Sharma, 2007).

ICT includes any communication devices like radio, television, cellular phones, computer and network hardware and software, satellite systems, as well as the various services and applications associated with them such as videoconferencing and distance learning. ICT can be considered as a subfield of Educational Technology. ICT in higher education is being used for developing course material; delivering content and sharing content; communication between learners, teachers and the outside world; creation and delivery of presentation and lectures; academic research; administrative support, student enrolment etc. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audiocassettes and CD ROMs have been used in education for different purposes (Bhattacharya and Sharma, 2007).

Table 1 The Four Rationales for Introducing ICT in Education

Rationale	Basis
Social	Perceived role that technology now plays in society and the need for familiarizing students with technology
Vocational	Preparing students for jobs that require skills in technology.
Catalytic	Utility of technology to improve performance and effectiveness in teaching, management and many other social activities.
Pedagogical	To utilize technology in enhancing learning, flexibility and efficiency in curriculum delivery.

Source: Cross and Adam, 2007

Review of related literature

Ozdmemir and Abrevaya (2007) found that ICT is reducing the cost per student and expanding the enrolments and makes the provisions for employers and supports learners. Lalitbhushan S. Waghmare, etal. (2014) studied "Role of Information and communication technology in Higher education: learners' perspective in rural medical schools". They concluded that there is a need to predict the role of technology in education and take appropriate measures to equip the stakeholders for adequate and optimum application of the same. Uttam kr Pegu (2014) studied "Information and communication technology in higher education in India: challenges and opportunities". The study revealed that ICT enabled education will ultimately lead to the democratization of education and it has the potential for transforming higher education in India. Manisha & Anju (2014) studied "The role of ICT in higher education in India".The study found that ICT playsa vital role as a strong agent for change among many educational practices. Habib H. (2017) studied "Role of ICT in higher education". The study revealed that ICT in higher education improves the teaching-learning process, provides the facility of online learning to thousands of learners who cannot go to colleges or universities due to their geographical location or many other reasons.

Major ICT initiatives in Higher Education

India is making use of a combination of ICT such as open-source software, satellite technology, local language interfaces, easy to use human-computer interfaces, digital libraries, etc. to reach the remotest of the villages with a long term plan. Community service centers have been started to promote e-learning throughout the country (Bhattacharya and Sharma, 2007). Several projects have reduced the costs, and it also has increased transparency. India has taken up major initiatives in terms of content delivery and furthering education through Information and Communication technology. In India, uses of notable ICT initiatives in education include:

- Indira Gandhi National Open University (IGNOU) uses radio, television and internet technologies.

- National Programme on Technology Enhanced Learning: a concept similar to the open courseware initiative of MIT. It uses internet and television technologies.

- Eklavya initiative: Uses the internet and television to promote distance learning.

- IIT-Kanpur has developed 'Brihaspati', an open-source e-learning platform (Virtual Class Room).

- Premier institutions like Calcutta have entered into a strategic alliance with NIIT for providing programmes through virtual classrooms.

- Jadavpur University is using a mobile-learning centre.

- IIT-Bombay has started the program of CDEEP (Centre for Distance Engineering Education Program) as emulated classroom interaction through the use of real time interactive satellite technology (Mondal and Jayanta, 2012).

- Sristi, the society for research and initiatives for sustainable technologies and institutions is facilitating the use of ICT for strengthening the capacity of grassroots inventors, innovations and entrepreneurs engaged in conserving biodiversity and developing eco-friendly solutions to local problems (Habib, 2017).

- The UGC initiated scheme called "ICT for teaching and learning process" for achieving quality and excellence in higher education.

- Network facilities with the help of ERNET, Ministry of Information and Technology, Government of India were installed at the UGC office to promote a healthy work culture. Along with this UGC launched a mega programme namely, 'UGC INFONET', a network of Indian Universities and Colleges, by integrating Information and Communication Technology (ICT) in the process of teaching, learning and education management. The network is managed by ERNET India and almost all the universities are its members.

- Information for Library Network (INFLIBNET), an autonomous Inter-University Centre of UGC is the nodal agency for coordination and facilitation of the linkage between ERNET and Universities. Training programmes for the manpower were conducted to manage the ERNET facilities and other aspects of systems including electronic subscriptions. In addition, UGC is encouraging creation of e-content / learning material for the teaching-learning process and management of education in colleges and universities (Mondal and Jayanta, 2012).

Role of ICT in Higher Education

The swift growth of ICT is taking place all over the world. They have emerged as powerful tools for the diffusion of knowledge and information. Their introduction and use in higher education have generated varied responses. The opportunities can be categorized as the aspects relating to the role of ICT for access and equity in education, their role in pedagogy for quality learning and teaching at higher education level and in inducing innovations in approaches and programmes.

ICTs can play an enormous role for improving access and equity in the education sector in general and higher education sector in particular.11th Plan proposed to achieve the target of 15 percent GER(Gross Enrolment Ratio) by 2012 through the increase in institutional capacity and increase in 'intake capacity' of existing educational institutions. The demand for higher education is expected to rise steeply in the forthcoming years. ICT lend them as an ideal mechanism to bridge this gap by complementing both the formal education system as well as distance learning systems (Neeru, 2009).

E-learning is emerging as an important strategy to provide widespread and easy access to quality higher education. Although presently the initiatives for the development of e-learning in India are continuing in a sporadic manner, UGC is advocating and making efforts to enhance the quality of higher education by framing policy guidelines for their integration in the classroom and other activities.

Another most important dimension of higher education sector influenced by ICT integration is in Pedagogy for improving the quality of teaching learning. The integration of ICT would not only help in promoting personal growth but also in developing "knowledge societies". The call of the hour is the need to provide education for everyone, anywhere, and anytime. Life-long learning has become the driving force to sustain in the contemporary competitive environment. Therefore to strengthen and / or advance this knowledge-driven growth, new technologies, skills and capabilities are needed.

Conventional teaching-learning processes are undergoing a paradigm shift. The focus of instruction is now on education programs/practices that promote competency and performance. Such curricula tends to require access to a variety of information sources, information forms and types; student centred learning settings based on information access and inquiry; learning environments centred or problem-centred and inquiry-based activities, authentic settings and examples; and teachers as coaches and mentors rather than content experts (Neeru, 2009).

Advantages of ICT

The main advantages of ICT in Education

- It enables students to learn round the clock. Affords coaching to the requirements/necessity of the student

- Provides educational activities in geographic areas larger

- Offers Committed teaching through individual communication.

- Empowers effective education.

- Deliver instructions according to the student necessities.

- Offers educational activities covering large geographical areas.

- Boost individual learning habits.

From the Student Perspective:

- Increased access to tool or site.

- Content rigidity is eradicated hence effective delivery is achieved.

- The amalgamation of work and edification which students can map to the real-time scenario.

- A learner-centered approach, allows you to learn effectively and also come up with new things.

- Drastic improvement in the quality of Higher education leading to an innovative way of collaboration.

From Teacher Perspective:

- Innovating present-day/modern learning modules.

- Easier use of multimedia or simulation tools.

- Helps to focus ICTs on eminence research through the utilization of diligent research procedure and comprehensive exploration.
- It improves the quality and helps to attract the students (Girish and Sureshkumar, 2017).

Challenges of ICT

ICT in Education has benefits as well as challenges also.

- The main challenge is cost. The cost of hardware and software is very high.
- Another challenging/hectic process is the integration of ICT into teaching is still in initial stages/ phases.
- Speed up Higher Education capability to innovate and adopt technology rapidly and effectively.
- Helping Higher Education Institutions to find and use technology ata reduced cost.
- Imposing technological systems from the top down without involving faculty and students.
- Installing learning technology without reviewing students' needs and content availability.
- Using inappropriate content from other regions of the world without customizing it appropriately.
- Providing an efficient technical manual and training should be provided after implementing technology in class-rooms else not adjusted to the technology which currently in use.
- Innovating a new model with the help of technology and collaborating with existing one or using it independently which will be a competitor globally in ICT age.
- Transformation of pedagogy by using technology and learning and make it more affordable and accessible. In spite, lack of infrastructure and interest from management to implement technology in Higher Education, regional problems like Power outage (Electricity), Internet Service Provider (ISP) and net availability and lack of awareness towards proficient use of technology with inadequate understanding/information were key factors for inevitable complexities for the successful execution of ICT in educational institutions.
- The potential of plagiarism is high as a student can copy information rather than learning and developing their own skills (Girish and Sureshkumar, 2017).

Conclusion

This paper has sought to explore the role of ICT in transforming education as we progress into the 21st century. In particular, the paper has highlighted the various impacts of ICT in transforming higher education and explored potential future developments. Education transformations have to promote technology-enabled education for the overall development of the country. Without the use of technology, we will never be able to educate 500 million people by the year 2030, which is what we need to claim our place in the league of developed nations of the world.

Suggestions

- It is essential more generally to provide prior training for faculty when introducing ICT since students are often more familiar with these technologies than they are.
- The use of ICT will enhance the learning experiences for children, helping them to think and communicate creatively. It will also prepare our children for successful lives and careers in an increasingly technological world.

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Women Literacy and its Effect on Health

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Abstract

Education is an art of imparting knowledge to others for the betterment of their lives and preparing them for achieving their aim, as a profession. The objective of this study is to identify the greatest hinders in the path of women's education and to assess the relevance of higher education in women's health and life. The barrier to women's education in India was the persistent belief that women should not design to talk paid employment although voluntary work was acceptable. This article will explain how illiteracy will affect the health status of women. For this purpose, various articles, journals, and reports have been used as it is a conceptual paper.

Keywords: *Women's literacy, Education, Higher Education, Women Health.*

Introduction

The orthodox male-oriented society in India has still not been able to adjust itself to the fresh wave of women's liberation (Singh *et.al.,*2018). Education is the process of facilitating learning or the acquisition of knowledge, skills, values, beliefs, and habits. Higher education is the aggregate of theoretical knowledge and practical skills that let theoretical and practical problems to be solved by a given type of training, developing and creatively evolving the modern achievements of science, technology and culture (Singh *et.al.,* 2018). According to WHO health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 1948). India is one of the few countries where women and men have nearly the same life expectancy at birth. There are systemic problems with women's health. The health of women is related to their status in society. Research on women's status that the contribution of Indian women to the families are often overlooked; and instead they are referred to as economic burden. Therefore, things like their education, marriage, and dowry are considered a major economic concern (Victoria *et.al.,*1998). In poor and backward family's women's education is not given importance due to the cost of their marriage and dowry. Unhealthy women are more likely to give birth to low weight infants. Finally, a women's health affects the household economic well-being, as an unhealthy woman in poor health will be less productive in the labor force. There are also differences in the state of fertility levels by state, education, religion, caste and place of residence. For example – Uttar Pradesh, the most populous state in India, has a total fertility rate of over 5 children per woman. On the other hand, Kerala, which has relatively high levels of female education and autonomy, has a total fertility rate under 2 (Victoria *et.al.,*1998). The women are known to be dependent and are sometimes called 'frog of well'. Women are welled in the well of illiteracy, culture, and tradition and the only way to dwell her it to provide knowledge (Agrawal *et.al.,*2017)

Studies

The country accounts for 30% of the world's non-literate population and out of which 70% are women. The non-literacy is much more intense in rural areas at 53.9%. We cannot forget that 68.84% of the rural population lives in villages.

A study conducted on a sample of 600 rural women, 279 were non-literate and 321 were literate. Caste differences also play a role in literacy rate, upper-caste include 36% non-literate and 64% literate women. In backward categories, only 37% were found to be literate. The values revealed that the percentage of literates was higher in upper casts. Also, literacy was affected by access to schooling and education. Due to poverty and distance of educational institutions for the rural girls (Kaur, 2018).

India has high maternal and Infant mortality. Antenatal care (ANC) services are crucial in reducing MMR and IMR but still, there are barriers to the reach and utilization of ANC services.

A study on 820 women of the village of Amritsar, Punjab showed that about 90% of women received at least one ANC during last birth. 59.15% of respondents did not receive any health advice from health workers during pregnancy, due to a lack of health education. (Garg *et.al.,*2017)

A study on delivery practices among women in rural Punjab carried out on 945 pregnant women in the verka block of Amritsar district. Education-wise 477 were educated up to primary, middle, higher secondary and graduates or above respectively while 410 were illiterate. Out of 945 respondents who delivered baby, about two-third, 625 of the respondents reported having home delivery and 320 reported of institutional delivery. The reason for home delivery was a traditional attitude 86.2% followed by economic reasons 13.4 % only 0.3% stated that the place for institutional delivery was far away. Hence study showed that the place of delivery was affected by the educational status of respondents (Garg, *et. al.,* 2010).

The major health concern for women is menstruation. In a study conducted on 88 girls of mean age 16 years centers regarding their knowledge about menstruation. A study showed that 39.8 % of girls knew about menstruation before menarche. Mother was the source of information in 48.9 % of girls followed by sister (25%), friends (12.5 %) and relatives (10.2%). Out of the total majority, 51.1% of girls have no knowledge regarding organs from where bleeding occurs. Only 33.1 % of girls knew that it is a physiological process while 59.1% did not know about its cause. 21.6 girls believe there is a toxin in menstrual blood. Data also showed that mother's education regarding menstruation was 79% for illiterate,15 % percent had primary education and only 6% gained secondary education percentage for higher secondary was 0. As mother was the major source for information for girls, the percentage for mother's education was not good. (Prajapati *et.al.,* 2015).

Another study to assess the knowledge regarding menstrual hygiene practices among adolescent girls. According to this study, structured education is effective regarding menstrual hygiene and practices among adolescent girls. In this study one group pre-test- post-test research design with 100 adolescent girls was selected which showed that only 23 samples in the pre-test answered about sun drying of the used and washed clothes. 58% of samples keep the used sanitary napkins in hidden places and the same cloth for one month. 100% of samples do not enter the holy places. Thus the samples were socially and culturally bonded with traditional practices during menstruation. In the post-test significant knowledge was gained. (Bhudhagaonkar *et.al.*, 2014).

In a study conducted on the anemia related knowledge among 100 college-going adolescent girls. It was found that only one fourth (25%) of girls having good knowledge and the rest of them were having poor knowledge. The electronic media and press media were the major sources of information among adolescent girls. (Pareek *et.al.,* 2015)

In a study on slums of Delhi, the emphasis was mainly on multinational counseling during pregnancy showed that literacy was one of the determinants for the non-utilization of antenatal care services and nutritional counseling was lacking. (Ghosh *et.al.*, 2015).

Mother's education, according to the NFHS, is highly correlated with the level of malnutrition in children. Children of illiterate mothers are twice as likely to be undernourished or stunted as children whose mothers have completed at least high school. Also in the case of severely undernourished children, illiterate mothers had three times as likely to be severely undernourished children as compared to mothers with at least a high school education. (Victoria *et.al.*, 1998).

Conclusion

On the basis of the above-detailed analysis and secondary data gathered from various sources, it could be concluded that higher education is the ultimate source for empowering women. Education has become necessary for their own well-being, their children and hence the family. Another interference drawn from the study showed that there are multiple causes behind the educational deprivation of women like cultural, patriarchal, caste, class, place, gender discrimination, the safety of girls, distance, economic condition, etc. Often, access to higher education is restricted for girls who live in rural areas or in towns without colleges or universities. Health education is thought to be the most neglected aspect. The role of local health workers and community participation would be crucial in improving the utilization of health services at ground level. Quality of rural education needs to be addressed by state and women should get participation in the developmental process.

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Role of Technology in Closing the Gender Gaps and Enhancing Women Empowerment

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Abstract

Having access to technology along with control over it has been the main issue of the human rights related to women. Technology plays a very vital role in closing the gender technology gap which means that women are given access to training and educational opportunities in the field of science, technologyand engineering and information technology. Nowadays, digital technology plays a very vital role in allowing organizations to exchange information rapidly. There is a strong need to have some solutions which are based on technology which may further help in solving the issues which are related to violence, health, and economic empowerment. Women across India as well as around the world face unconscious bias, because of being deeply rooted and bound by the cultural factors due to which they find it difficult to thrive in the technology field.Technology plays a very vital role for improvement in the working conditions. However,women, particularly in rural areas, are often denied access to technology due to a lack of proper information and discrimination. The present paper seeks to examine the role of higher technology in empowering women thus paving the way for the growth of the economy.

Keywords*: Technology, Women, Empowerment, India.*

Introduction

The future of India is seen in the women of today who are independent, committed, ambitious and who have a strong urge to prove themselves. A great need has been felt to organize the women in various groups and also recognize their role in the formulation and development of various policies. Women empowerment is crucial not only for their own development but also for the society, nation, and global economy as a whole. The irony today is that due to the problems of ignorance, and lack of recognition on the part of the economy regarding the indispensable role played by the women they have been prevented from making their contribution to the country. With regard to the multidimensional roles and responsibilities which are played by women, there is a great need to empower women socially, economically, and especially with regard to technology so that it enables them to stand strong in the society.There is a difference in the perceptions of women in relation to gender inequality.It was a matter of yesteryears when women were not found to have a significant presence in the field of science and technology. Apart from many basic reasons responsible for the same two major attributes can be judged as to their perceptions about their role and the expectations of the society from them. Family commitments have often resulted in obstructing their role in society. Gender inequality has been the subject of many efforts made at the international level. The culmination of multiple efforts resulted in the adoption of the Convention on the Elimination of All Forms of Discrimination against women in 1979.

Objectives of the study

To study the access of ICT to Indian women.

To assess the role of technology in reducing gender gaps.

Methodology

The study makes use of secondary data as journals,reports, and websites for the collection of data.

Women Empowerment: The term empowerment may be defined as a way or a social action where women are accepted or allowed to make decisions and a strong emphasis is put on the participation in the economic decisions. Empowerment is also concerned with enabling the opportunities to women without putting any sort of restrictions in terms of their education and decision making.Several principles need to be followed for women empowerment.Women empowerment is one of the main issues which is concerned with the idea of sustainability.One of the significant achievements of the United Nations has been gender equality. Gender inequalities still found themselves deep-rooted in society. Women face a lot of occupational and gender wage gaps.The term empowerment in terms of technology is many a time used to describe the opportunities which are offered by ICTs in order to improve the status of women and positions in society. The provision of education is a basic human right and is a major indicator of development. It also provides the basis of women empowerment and affects the wellbeing of families and the community as a whole. The use of technology by using innovative methods can help to create career opportunities for women. The changing role of women in the present society in coherence with their working conditions and education levels makes them an important part of society and thus they provide ignition to the development process. Sustainable development calls for the provision of equal work opportunities to each and every member of the society. Women are an indispensable part of our society and the harmonious growth of society depends upon the progressive growth of women. This calls for empowerment. It is the main element of human development which is a process to enable people's choices.

Gender Inequality One of the main barriers to human development is gender inequality. Much has been talked about but lesshas been done irrespective of the fact that the era of globalization brought in its wake the great importance of women. Women are in many fields and times are discriminated against on the basis of gender, health,education, and political representation. The gender inequality index is an inequality index that measures inequalities in three major aspects of humanity which include reproductive health, empowerment, and economic status. The framework of GII is the same as that of HDI and it also measures the human development cost of gender inequality.

Gender Inequality Index: The gender inequality index is an inequality index that measures inequalities in five major aspects of humanity which include reproductive health, empowerment, and economic status. The framework of GII is the same as that of HDI and it also measures the human development cost of gender inequality. The major aspects of gender inequality index as given by UNDP include :

- Maternal mortality rate
- Adolescent birth rate
- The proportion of parliamentary seats occupied by females.
- The proportion of adult females and males who are aged between 25 years and older who have at least some level of secondary education.
- GLOBAL GENDER GAP INDEX: The global gender gap index is based on the following pillars:
- Economic participation and opportunity
- Educational attainment
- Health and survival
- Political empowerment

Table 1 The Global Gender Gap Index 2020 rankings

Rank	Country	Score
1.	Iceland	.877
14.	Denmark	.782
31.	Cuba	.746
57.	China	.723
112.	India	.668
152.	Iraq	.530

Source:Global Gender Gap Report 2020

India made a drop of 4 places from 2018 to reach the 112th rank in the world's economic forum Global Gender Gap Index 2019-20.

Sustainable Development Goals: Sustainable development goals have aimed at promoting inclusive and sustainable industrialization and thus directly contribute to the Agenda of 2030 for Sustainable Development.. Sustainable development calls for the provision of equal work opportunities to each and every member of the society achieving gender equality and empowering all women and girls is the 5th SDG.Some of the indicators of gender equality are leading towards progression,however when the number is taken in terms of overall indication seems to be quite high.An insufficient progress is nowadays seen in terms of legal discrimination, social norms, etc. Attaining gender equality is not only a fundamental human right but also a basic foundation for a peaceful,prosperous and sustainable world. Improvement in property rights and improved access to natural resources can go a long way in the reduction of gender inequalities.

Digital Divide and ICT: The term digital divide or the term digital split refers to a social issue that is concerned with the difference between those who have access to the internet and those who have not. This term became very popular with the policymakers, scholars and other groups in the late 1990s.The term digital divide is a clear indicator of the fact that society is divided into two groups. The gap needs to be bridged. Different suggestions are given in this regard which may help in the transformation of the society. Some people suggest that the internet and other ICTs are helping in the transformation of society. One argument which is generally seen is in the favor of literacy which means that being literate is a good argument and in general, is not related to any new technological devices. Many arguments are in the favor that why bridging the digital divide is important:

- Literacy: Although literacy is not an essential element that includes technology or the use of technological devices however many societies consider that political,economic and social participation requires the need to know about internet usage.

- Economic equality: Many people consider that themajor component of civic life is the internet as it may ensure a guarantee for its citizens.In the modern era, a large amount of information related to civic life, safety,career, etc are being increasingly provided by way of the internet.

- Social mobility: It is considered that computer networks play a very important role in learning and career and therefore the education should make use of computing and career.

- Economic Growth: Many people think that the information infrastructure and proper and active use of it can be a very effective means of economic growth for less developed nations.

- Access to rural areas: The major test of the digital divide is the internet. However, nowadays a large number of ways are available to eliminate the problem of the digital divide in rural areas.

Projects of ICT in education& other sectors inIndia: With avision to improve the availability of improved

computer technology to the community as a whole in various fields government of India has launched a number of schemes.

Saransh: A Decision Support System Known As Saransh Has Been Introduced In The Schools By Central Board of Secondary Education with a vision to improve children's education and enhancing the interaction between school parents and children. The mobile App for the same was introduced in 2015.

Swayam: The study webs of Active Learning for Young Aspiring Minds is an integrated platform for the offering of online courses and the covering of schools to the Postgraduate level. These online courses are not being used only by the teachers but also by the students which ensures a life long learning for them.

Syayam Prabha: It is an initiative to provide about 32 High-Quality Education Channels by way of DTH across the dimensions of the country. It has a curriculum that is based on the course content which covers diverse disciplines.

National Digital Library: The National digital library is a project which is meant to develop a framework of the virtual repository of learning resources and having a single-window search facility. The contents available are related to all the domains of education and all major levels of life long learners.

Spoken Tutorial: They are 10-minute long, audio-video tutorials and are open-source software which is meant to help to improve the employment potential of students. It is created for the purpose of self-learning where audio has been dubbed into all languages. These tutorials are effectively designed to give training a new user without the use of a physical teacher.

Free And Open Source Software For Education: It is a project which has been used for the promotion of the use of open-source software in educational institutions.

Virtual Lab: The virtual lab's project is meant to develop a fully interactive simulation environment so as to perform experiments, collect data and give an answer to questions so as to assess the knowledge which has been acquired. In order to achieve the objectives of the project, there is a need to develop virtual laboratories and problem handling capabilities.

E-Yantra: E-Yantra is a project which is meant for enabling the effective education across engineering colleges in India. The training which is given to teachers and students is imparted by way of workshops. The projects and codes are available on the e-yantrawebsite,www. E-yantra.org.

E-SevaCentres in Andhra Pradesh: This project was run by the District Administration in Andhra Pradesh where ICT enabled rural e-sevacentres have been established. The centres are run by the self-help groups of women who belong to the poorest section of the society.

Kudumbashree: It is a project which has been started in Kerala with a mission for the eradication of poverty among poor women. This project has helped in the generation of income among individuals. With the help of ICT trainingprogramme, women started participating in district and state-level events.

Role of technology in women empowerment: The revolution that took place in the technology in the 20th century led to the minimization of the importance of geographical, economic and social barriers and thus helped in the boosting of productivity. There is no denial of the fact that the advent of new Information and communication technologies have a great impact on political, economic and social spheres. With the advent of the internet, women have been given full and uninterrupted access to information and knowledge. Moreover, the use of ICT also saves time and space. The idea of empowerment through inclusive policies helped the policymakers to make refocus on the issues of women. Thus enabling the women to gain confidence financially as well as socially.Commonly, it is said that women have comparatively less involvement in ICT then men. However, they are equally meant for everyone and the paybacks of this technology should not only be available to males. Women today in this era of globalization need to organize and keep them well versed with the ICT.The progress of a nation requires

women empowerment. Technological intervention requires a potential in the women to get involved politically, geographically,economically and socially.Nowadays, the concept of the digital divide is of great concern as these technologies have great importance for economic and social development which is needed to be ensured by women in developing countries.

Recent examples: Some major examples of women playing a strong role in the use of ICT:

Vanitha Narayanan, MD,IBM: Started the career as a trainee she left no opportunities ungrabbed for the corporate sector. She owes the credit of the diversification of IBM from its traditional role to telecom. The company strengthened itself in telecom, retail and industrial sectors. Since her appointment in the company, there has been a significant improvement in the number of clients as Birla Sun Life Insurance, Asian Paints, etc.

Neelam Dhawan, MD,HP,INDIA: She introduced the first affordable PC called HCL Busy Bee. She also advertised the product on hoarding and in newspapers.

Kumud Srinivasan, President, Intel India: KumudSrinavasan has been working with Intel India for the last 25 years where she has risen in her ranks by way of her hard work and ability to perform all types of roles which have been assigned to her. She served as the Vice President and General Manager of IT for Silicon Software and Services. She became the first woman to head the Intels operations in India.

Raji Arasu,Vice President And Cto Stubub: RajiArasu did computer engineering at that time when not many women were in the field of computer engineering. Her expertise helped her to become the vice president of engineering for trading purposes with eBay. She also works for women in the tech space.

Conclusion

India has a strong determination to become a digitalized nation which is quite clear from the Digital India initiative. Women entrepreneurs have always been considered as a major force for the development of a nation. Digital India and other national and international policies and movements strive to ensure that equitable access to information technologies is provided irrespective of gender discrimination. Women have often been lagging behind in ICT adoption. There is a greater intention among the women to fulfill the familial roles and for communication. However, their leading roles and untiring participation in the economic development of the country cannot be overlooked.

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Higher Education in India:
Issues, Challenges and Suggestions

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Abstract

Education is an essential tool for achieving sustainability. It plays an important role in the economic development of our country. India's higher education system is third largest in the world after China and United States. After independence great emphasis was laid on the quality of higher education and many good institutions of learning in all disciplines were established. But, still India is way behind in providing world class education. If India has to become an economic power then it has to pay immediate attention on the quality of higher education. There are numerous challenges, issues and concerns in higher education system of India, which need to be looked upon. There is an urgent need on the part of government and private promoters in the field of education and skill development to meet the challenges that are deteriorating the standards of higher education. Many problems are being faced by higher education system in India like inadequate infrastructure facilities, outdated teaching methods, brain drain, declining research standards, theoretical course structure, poor teaching quality, outdated, rigid curricula and the absence of employer engagement in the course content and skills development and paucity of funds for entrepreneurship and skill development and for replacing obsolete teaching technologies. Moreover, there is incompatibility between the course curricula and industry requirements. The aim of this paper is to highlight the emerging issues, challenges and concerns in the field of higher education system in India. The paper also throws light on the measures that can be adopted to improve the quality of higher education in India. To drive our economy forward we need highly educated and skilled workforce who can transfigure our country from a developing nation to a developed nation. So, the need of the hour is to transform the higher education system to make the Indian educational system more competitive globally.

Introduction

Education is the process of facilitating quality learning, or the acquisition of knowledge, skills, values, beliefs and habits. Education is a weapon to improve one's life. Although, India's higher education system ranks third largest in the world after China and United States. But, Indian higher education system does not stand anywhere among the world higher education systems in terms of quality. Higher Education plays a vital role in the overall development and growth of the nation. Quality education is the mantra of present day education system whether it is elementary or higher education.It has been rightly said by Nelson Mandela that, "Education is the most powerful weapon which you can use to change the

world". Quality of education is linked to quality of teachers who impart knowledge to students. There are various issues in higher education system in India that needs to be looked upon seriously. Quality education is quite expensive and India has not made much investment in education sector. Education is the source to develop human resources. Therefore, the aim of colleges and universities should not be just imparting education to the students but providing them quality based education. It is the higher education that helps in building nation as it offers highly skilled labour with clarified thoughts and ideas.

Objectives of the Study:

1. To study the issues, challenges and concerns being faced by higher education system in India.

2. To suggest the measures that can be taken to overcome these issues and challenges.

Issues, Challenges and Concerns in India's Higher Education System

- Irrelevant and Rigid Curriculum: In most of the higher educational institutes curriculum is out-dated and irrelevant. It is theoretical in nature. The practical relevance of subjects is not being taught to students. The curriculum set by the educational institutes does not match with the requirements of industry. And this is one of the major reason behind unemployment of the graduates. Moreover, there is absence of employer engagement in the course content and skills development. No efforts have been made for interdisciplinary learning.

- Poor Infrastructure facilities: Most of the colleges and universities in India lag behind in the basic and high-end research facilities. Many institutes are running with inadequate infrastructure and basic facilities like library, hostels, transport, sports facility etc. which is necessary to rank amongst the quality institutes.

- Lack of Collaborations with Industries: Presently there are very less tie ups of higher educational institutes with industries.

- Unemployment: Graduates hardly get employment which is one of the major problems in India. Few Indian graduates are considered employable.

- Deteriorating Quality of Teaching: The goodwill of the educational institute is not only linked to the quality of students but also to the quality of faculty imparting knowledge to students. But nowadays, teachers do not have wide knowledge of their subject matter and they lack desire to learn throughout the course of their career.

- Faculty under Pressure to Publish Research Papers: The faculty is induced to get their papers publish in journals that may not be of superior quality. Due to this pressure they focus more on publishing papers rather than on teaching.

- Lack of Research and Innovation:The biggest challenge being faced by higher education in India is lack of research and innovation. There are insufficient resources which act as a hurdle in promoting research among the students. Moreover, research scholars do not get their fellowships on time which affects their research.

- Outdated Methods of Teaching: In many educational institutes still chalk and talk method of teaching is used. They are not comfortable in using audio visual aids or ICT while teaching. They are not aware about what the global industry demands.

- Brain Drain: It is one of the biggest challenges being faced by our country. Students prefer to settle abroad after getting education in India on hefty packages in MNCs. They do not believe in serving their country.

- Quota System: It is the biggest challenge that India is facing in higher education. Talent and merit

should be given priority while admitting students in schools and colleges rather than quotas. Many candidates of general categories who deserve get ignored. Quota system has deteriorated the quality of students' intake.

- Increase in Profit Making Institutions: Privatisation in higher education system has ruined ii because their main motive behind opening such institution is just to earn profits rather than working for societal development of our country. Education is no more a noble cause. It is more of a business now.

- Shortage of Faculty: There are many academic posts in the educational institutions that are lying vacant for no reason. Faculty to student ratio is not up to the mark. It is a serious concern.

- Low Student Enrolment ratio: There is enormous gap between the students who pass out from school and who enrol themselves into higher education.

- Lack of Financial Support: Another key issue in higher education is inadequate financial support from the government and society for higher education in India. Government under invests money for the development of education sector.

- Political Interference:Most of the central and state universities that are supposed to be autonomous, but in practice government intervenes extensively in how they are run.

Suggestions for Improving India's Higher Education System

- To make the education system globally competitive there is need to implement innovative approach in higher education system of India.

- Colleges and Universities must enhance the quality of their infrastructure so as to attract the students towards their institutes.

- Collaborations and tie-ups with industries, research centres and national research laboratories must be encouraged.

- Skill based courses must be introduced in higher educational institutions to enable the students gain deeper knowledge of the subject so that they can get jobs in highly reputed institutes.

- Political or Government interference must be reduced in both public as well as private universities and colleges. Government must provide sufficient funding for all institutions.

- Students should be enrolled in universities and colleges on the basis of merit rather than on basis of Quota system.

- Students should not be restricted to gain knowledge about their own subject only. Inter disciplinary approach must be introduced in higher education.

- The course curricula of higher educational institutions should be dynamic and not rigid and it must match the industry requirements.

- There should be provision of adequate, trained and qualified faculty.

- The fee structure of colleges and universities must be linked to students' capacity to pay for the cost.

- The traditional methods of teaching should be replaced with innovative teaching methods like leaching through smart boards, teaching through flipping classrooms, teaching through virtual reality and so on.

Conclusion

India is today one of the fastest developing countries of the world but it lags behind in its education sector. There is an urgent need to overcome the problems of higher education in India for transforming

our country from developing to a developed nation. We need highly educated and skilled people who can drive our Indian economy forward. So, quality education is the need of the hour. No doubt there are opportunities in the higher education but one must know how to take advantage of these opportunities and how to make it accessible to others.

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Role of Quality Higher Education in Social Economic Development of Women

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Abstract

Education renders empowerment and freedom for excellence to human society. Nevertheless, literacy in half of the female population still lags behind. Education is widely understood as an indicator of women's status and even more importantly as a factor for the empowerment of women. The aim of higher education is to generate knowledge, encouraging critical thinking and imparting skills relevant to society as determined by its needs. It is only higher education that makes people aware of their rights and duties and their optimal usage. Higher education is one of the most important means of empowering women with the knowledge, skills, and self-confidence. It brings a reduction in inequalities and helps in improving their status within the family. Presently, women are participating not only in traditional courses but also in various areas thought to be belonging to only men's territory. In the future, it is necessary to widen the scope of existing fields and the creation of new fields that cater to the needs of women. For the harmonious development of the country, it is essential that women are empowered togo hand by hand and shoulder to shoulder with men. For empowering women, higher education is bound to play a vital role.

Keywords: *Empowerment, Higher Education, Social and Economic Development, Women*

Introduction

'To educate your women first and leave them to themselves, they will tell you what reforms are necessary'- Swami Vivekananda. Education is the right of all the citizens of a Nation. Education, primary, secondary or higher must be provided to all categories of citizens by breaking down constraints and barriers. Education is the basic building block of Literacy. It is a basic component of social cohesion and national identity.

Higher Education

"The higher education is that which does not merely give us information but makes life in harmony with all existence" (Ravindranath Tagore).

Higher Education is the aggregate of systematized knowledge and practical skills that allow theoretical and practical problems to be solved by a given type of training, utilizing and creatively developing the modern achievements of science, technology, and culture. The term "higher education" is also applied to the training of highly skilled specialists in the field of economics, science, technology, and culture

at various types of higher schools, which accept persons who have successfully completed secondary general-education schools or secondary specialized-education institutions.

Empowerment

Empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Education is one of the most important means of empowerment by giving proper knowledge, skills, and self-confidence. Education is considered as a basic requirement and a fundamental right for the citizen of any nation. It is also a powerful tool for reducing inequality and providing independence to any person. For centuries, women have been treated as the weaker section of our society. Women are denied of various job opportunities. Large womenfolk of our country are still illiterate, backward and exploited. This situation is due to cultural barriers and a traditional outlook. Education is the only factor to get rid of these challenges posed by the traditional outlook. So, women must awake from the deep slumber and understand the true meaning of empowerment. It's high time that women get out of those traditional customs and dark ages.

Status of Women in Indian Society The worth of a civilization can be judged by the place given to women in the society. The influence of the Mughal rule caused considerable deterioration in the status of women in India. They were deprived of their rights to equality with men. Raja Ram Mohan Roy started a movement against this inequality and subjugation. The contact of Indian culture with that of the British also brought improvement in the status of women. The third factor in the revival of women's position was the influence of Mahatma Gandhi who induced women to participate in the Freedom Movement. As a result of this retrieval of freedom, women in India have distinguished themselves as teachers, nurses, airhostesses, clerks, receptionists, engineers, and doctors. They are also participating in politics and administration. But despite this amelioration in the status of women, the evils of illiteracy, dowry, ignorance, and economic slavery will need to be fully revoked in order to give them their rightful place in Indian society.

Need for Women Empowerment: The need for women empowerment in our present society may be attributed to the following:

- Empowerment of women enables them to acquire knowledge, skills, and techniques for their betterment of life

- Economic empowerment of women helps in gender equity, which is the desire of every woman

- Empowerment provides the power of self-decision making to every woman. It helps in having positive thinking on the ability to bring about a change. It helps in increasing one's positive self-image and overcoming all the stigmas of our society. It also helps to change perceptions of others by democratic means

- Empowerment also helps in access to information enabling to take the right decisions

Women Empowerment and Need of Higher Education Women during the Vedic age got the most honoured positions in our society. They had the right to education and were free to remain unmarried and devote their whole life to the pursuit of knowledge and self-realization (Seth, 2001). But during civilization women lost their prominence and accepted secondary status to men. Though women constitute about 48% of the total population, yet they lost their status due to socio-cultural discrimination. At present, women are playing many roles in society in the developmental and decision-making processes. However, their participation still is pretty less. Since women can play a very important role in the development of society and country, therefore, identification of skills and occupations suitable for women is required. For women, empowerment provides the ability to make decisions, fight for their rights and become independent. An empowered woman has the ability to develop critical thinking, decision-making, and

actions through collective processes; ensuring equal participation in developmental processes; enhancing self-esteem and self-confidence. Higher education is one of the most important means of empowering women with the knowledge, skills, and self-confidence. It brings a reduction in inequalities and helps in improving their status within the family. Higher educational achievements of women can have ripple effects within the family and across generations. The year 2001 was celebrated as a women's empowerment year, which recognized women as agents of socio-economic change and development in the country. For better outcomes, higher education needs to take responsibility for:

- Cultivation of positive self-image and self-confidence developing capacity for critical thinking and decision-making
- Providing continuing education and correspondence centers for organizing vocational and literacy skills, efficiency in agricultural and home science colleges
- Industrial training institutes with diverse courses, keeping in view the job potential, facilities for vocational counselling
- Imparting information about credit, banking, entrepreneurial development and access to women's technical education
- Providing women's studies research centers and organize seminars and workshops to discuss women-related issues and disseminate information and encourage interaction with students and the general public through the media
- Providing classes on legal literacy programmes for women's socio-economic development via media, adult education and information and training support. A more relevant and responsive curriculum catering to the cultural and occupational needs of women.

Future Prospective Presently women are participating not only in traditional courses but also in various areas thought to be belonging to only men's territory. But a lack of educational and training facilities for studying science and the type of employment available for women holds them back. Thus, one of the thrust areas of higher education is to include a study of technology to help in the development of women in research and employment. In the future, it is necessary to widen the existing scope and creation of new fields that cater to the needs of women. Universities and colleges have to offer add-on courses that add value to the degree courses. The target of higher education is to provide women's access to vocational, technical and professional education. There are numerous policies and programmes for the betterment of women. In the emerging global environment, women are required to develop a more skilled approach to cope with the rapid multiple changing environments. In India, career guidance and counselling courses in women colleges are needed to meet social and market demands. Courses such as computer science, electronics, information technology, home science, law and governance, molecular medicine should be included in their curriculum. Courses in fashion designing, clinical nutrients and dietetics, nursing and business administration, personality development and spoken English, commercial and secretarial practice, media careers, public relations, advertising, garment technology, hotel, and catering studies can be offered as certified courses. We further should focus on some unconventional courses like event management, puppetry workshops, television scriptwriting, management degree, and aviation law for women students. The life insurance corporation of India has been already conducting crash courses to train women who need financial assistance for healthy survival.

Conclusion

Looking at the present scenario, it can be concluded that women in modern society are moving very fast under the shadow of the population. In order to promote women empowerment, it is necessary to create an environment that will allow women to participate in educational programs and share the

benefit. Education is the foundational stone of women empowerment which could be achieved through cooperative efforts of the government. Higher education was recognized as a powerful instrument of social-economic advancement of the society in general and a vehicle for upward social mobility. It must be admitted that women are no way lesser than men. They have all the capabilities that a man possesses.

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Psychosocial Status: Effect on Nutritional Profile and Social Scenario of Girls in Higher Education Institutions

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Abstract

Thepresent study was carried out to assess the effect of psychosocial status on the nutritional profile of late adolescents (female) in Dimapur district of Nagaland and its effect on the social scenario. The study was conducted on 220 girls of age between 18-20 years old. A self-administered questionnaire was used to collect the data. The questionnaire contained relevant information consisting of general information, anthropometric measurements, dietary intake, 24 hours dietary intake, physical activity and psychosocial factors. Out of 220 participants, 97.7% were suffering from psychological distress and were in the habit of skipping meals, mostly breakfast and lunch. The study revealed that the majority of the participants did not meet the daily requirement as recommended by RDA. Due to the psychological stress and social scenario, an effect is felt on the education profile thus the quality of higher education.

Keywords: Adolescents, Psychosocial status, Nutritional status, Anthropometry

Introduction

Adolescence, is a period of transition between childhood and adulthood, occupies a crucial position in the life of human beings. The adolescent period is a very important phase in the life span of an individual and it is the time when the nutrient requirements of the body are high. Inadequate nutrition in adolescence can potentially retard growth and sexual maturation and can put them at high risk of chronic diseases particularly if combined with other adverse lifestyle behaviours (Singh et al, 2014). Over the past two decades, there has been a significant increase in obesity and obesity-related disorders among individuals in their teens and 20s. The prevalence of obesity tends to increase with age, particularly college years are an important time for the development of obesity (Pona, 2015). Obesity is one of the major public health problems throughout the developed world. The number of studies has documented that obesity is associated with various forms of psychological distress, including anxiety and depressive disorders. Some evidence suggests that the increase risk of developing mood or anxiety disorders in adulthood is due to obesity in childhood and adolescence. Other studies demonstrate that the increase in the likelihood of obesity in adulthood is because of depressive symptoms, particularly if they occur early in life. However, the timing and direction of the relationship between obesity and psychological distress still remain controversial (Kubzansky *et al*, 2012). According to WHO, 2005, the study stated

that overall nutrition status was shown to be very poor among adolescent girls of poor rural groups in India (Rajasthan). A study reported that 79% suffered severe chronic energy deficiency (BMI <16), 74% from anaemia and 44% had signs of vitamin B complex deficiency. Both in Energy and protein intake were inadequate on the basis of national recommended dietary allowances. Similarly, in urban Bangladesh, it was reported that there were inadequate intakes in a high proportion of school girls aged 10-16 years. Only 9% met the recommended daily allowance (RDA) for energy and 17% for protein. Girls from less-educated families (particularly mothers) were more likely to be thin and short for their age and were having diets of poorer nutritional quality. Thereby directly affecting the quality of education and performance.

Materials and Methods

Study area: The study was conducted in Dimapur district of Nagaland. The data were collected through a questionnaire. The sample size was 220 girls within the age group of 18-20 years.

Period of the survey: The data was collected in the month of June and July 2018. All the girls were observed separately and the questionnaire was clarified to all the girls.

Details of the questionnaire:

* General information
* Anthropometric measurements
* Dietary patterns
* Physical activity

Data collection: After completing the data collection, the data was arranged in series and the data were transferred in MS Excel sheet. The collected data was analysed by SPSS and the result was presented in mean percentage.

Results and Discussion

Table-1.1 Distribution of psychosocial factors.

Psychosocial factor	No of participants	percent
Psychological distress absent	5	2.3%
Psychological Distress present	215	97.7%
Total	220	100%

The previous study conducted by (Niranjan et al, 2018) on late adolescent revealed that out of the total 324 participants, one fifth of the adolescents (20.9%) had psychological distress. Study done by lee et al, 2017 showed those individuals who were overweight were associated with depressed mode. 97.7% female were found suffering from psychological distress.

Table 1.2 Distribution of snacking in between meals

Eat snacks between Meals	Females	
	N	%
YES	114	51.8%
NO	106	48.2%
Total	220	100%

According to the study conducted by (Yahia et al, 2008) Daily intake of snacks apart from regular meals was more common among females than males (55.6% vs. 50% respectively). (Scully et al, 2007) reported that 51% of participants have the habit of eating snack foods four or more times per week and also 44% having high-energy drinks four or more times per week. The above table shows that females were in a habit of snacking in between meals. The result showed that 51.8% females snacks between meals.

Table-1.3 Distribution according to the nutrient intake as compared to RDA

Nutrient	RDA	Mean actual value
Calories (kcal)		
Girls	1900	1378.35
Carbohydrate(g)		
Girls	285	229.67
Protein (g)		
Girls	55	43.14
Fat (g)		
Girls	20	29.36
Calcium (mg)		
Girls	600	157.45
Iron (mg)		
Girls	21	5.60

Many studies conducted among college students have concluded that this population does not meet the recommendations set by the Dietary Guidelines (Brunt & Rhee, 2008; Davy, Benes, & Driskell, 2006; Hendricks, Herbold & Fung, 2004) On supporting the above studies, another studies conducted by (Bion et al, 2008) found that the daily dietary intake does not meet the RDA, energy with deficit of 21% in relation to the recommended one.

CALORIE: Table 1.3 revealed that the calorie intake of the girls was below the RDA (i.e. they met (1378.35) instead of (1900) in RDA.

CARBOHYDRATES: the average daily CHO intake among girls was (229.67) g instead of (285g) in RDA.

PROTEIN: The averages intake of girls were (43.14g) instead of (55g) in RDA.

FATS: The average fat intake of girls was (29.36g) instead of (20g) in RDA. It was found to be higher than RDA.

CALCIUM: The calcium intake of girls (157.45mg) was much lower than the RDA (600).

IRON: Iron is found to be a deficit in the diet. The mean intake was (5.60) instead of (17) according to RDA

Conclusion

In a study on the effect of psychosocial status on the nutritional profile of late adolescents (female) in Dimapur district of Nagaland, It was concluded that the majority of the participants were under psychological distress (i.e. 97.7%). A number of girls were in the habit of skipping meals, especially lunch and breakfast was the most meal skipped among adolescent girls. Girls were also in the habit of snacking between meals and none of the girls' daily nutrient intake met the recommended dietary intake. Thus it can be concluded that psychosocial status and social scenario have an effect on the nutritional

profile of students. This can further lead to an effect on the quality of education and performance. Thus higher education and changing social scenarios have a direct effect on the nutritional status of students.

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Innovation and Research in Higher Education Institutions through New Product Development

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Abstract

The purpose of higher education is not just to provide education but also to provide an opportunity to inculcate research and skill development in students. Innovation and research are very important for new product development. It gives a platform for capacity building. The fruit Prunus Persica is found in abundance throughout the Mid-Himalayan regions but, no attempt so far has been made to utilize the fruit for processing and developing a value-added product.The present study was undertaken with the objectives, to develop value-added product i.e low in cost, to assess the physical characteristics, to carry out sensory evaluation and shelf-life studies. The recipe and method of preparation of product viz. RTS beverage has been standardized.The prepared product was assessed for their nutritional profile, microbiological status, and consumer acceptability. The value-added product prepared for the studywas found to be economically viable and can be promoted for commercialization of technologies for entrepreneurs.Thus, the development of such a product may help the consumers to harness the nutritional and medicinal properties of such underutilized unexploited fruits.

Key Words*: Wild peach, Value addition, Processing, Standardized*

Introduction

A major field of research also includes exploring the unexplored territories. Himachal Pradesh is a pre-dominanatly horticulture state of India especially known for apples. The productivity of horticulture crops/fruits is largely influenced by geographical and environmental diversity prevailing in different zones of Himachal Pradesh. The wide variation in altitude and other agro-climatic parameters such as rainfall and temperature, the State is categorized into four agro-climatic zones which include:

- Sub- tropical sub mountain and low hills (0- 914 m above msl).
- Sub temperate sub-humid mid-hills (915-1523 m above msl).
- Wet temperate high hills (1524-2472 m above msl).
- Dry temperate high hills and cold deserts (2472 m above msl)**.**

In addition to major fruits, the various underutilized fruits are widely grown in different zones of Himachal Pradesh, which are being used by the local inhabitant. These fruits were an important source of food for mankind before the dawn of civilization and domestication of present-day fruits. Cavemen in forests also depended on these fruits and passed on valuable information on utility and choice of wild species of fruits from generation to generation. These fruits are grown throughout the Himalayas and

contributed directly to the cultural heritage of India. Even today, these fruits are eaten in plenty by local people, as they are commonly available in abundance in their habitats.

Underutilized fruits are those which are neither cultivated in an organized farming system nor processed by established commercial processing methods. These crops have many advantages in terms of easiness to grow, hardy in nature and production of the good crop even under adverse conditions. Most of these fruits are rich sources of vitamins, minerals and other nutrients. A large proportion of the rural population depends on locally available fruits to meet their dietary requirement. Most of these fruits have an exotic flavour and attractive colour. These fruit crops have their own history of consumption. Local people are well aware of their nutritional and medicinal properties. The popularity of these fruits varies from fruit to fruit and locality to locality which can be enhanced to a greater extent through publicity. The utilization of these fruits not only enhances the components of our food basket but also helpful in increasing the beneficial effect of such fruits.

The fruit has tremendous medicinal value and is used in curing various diseases/disorders. So, there is a great scope for the processed product from the fruit not only because of their exotic flavor but also due to their nutraceutical importance and therapeutic value. Processing of underutilized fruit into value-added product results in a wide variety of exotically flavored products with better nutritional and sensory qualities that may also unveil new markets for export.

Materials and Methods

The methodology section describes actions to be taken to investigate a research problem and mode or method of collecting information for any study undertaken. The research methodology and procedures to achieve the foregoing objectives have been described under the following heads:

1.   Procurement of raw material.

2.   Physical properties of underutilized fruit.

3.   Standardization/preparation/development/formulation of value added products.

4.   Determination of economics of prepared products.

Procurement of raw material: The underutilized fruit viz. wild peach is procured from the agro-climatic zone. The cultivated fruit viz. peach for the preparation/formulation of the value-added product was purchased from the local market. The other ingredients namely sugar, salt, spices etc for the preparation/ formulation was also purchased from the local market.

Physical properties: On an average ten fruits were selected randomly for physical characteristics, which represents a whole lot of fruits. The fruit was scrutinized for the parameters i.e color, shape, weight, length, breadth, peel percentage, stone percentage.

Preparation/ formulation/development of the value-added product: The value-added product RTS beverage was prepared from the selected wild peach. The prepared product was analyzed for microbiological analysis and consumer's acceptability/ sensory scores at fresh, quarterly and half-yearly for shelf life.

Fig. Flow chart for preparation of beverage from selected underutilized fruit.

Selection of fruits
↓
Sorting and washing
↓
Peeling

↓

Stone/seed removal

↓

Extraction of juice

↓

Homogenization/blending

↓

Seperation of fibrous material with the help of muslin cloth/seiver

↓

Filling of beverage in glass bottles

Quality evaluation of value-added products

Organoleptic evaluation: Sensory evaluation depends upon the responses by different sense organs as eyes, taste buds of the tongue and olfactory lobes of the nostrils. The prepared product was evaluated for sensory scores at fresh, quarterly, half-yearly of storage interval. The 9-point Hedonic scale **(Larmond,1977)** was employed for the sensory evaluation of the prepared product.

Microbiological analysis (Gould, 1978): The product prepared from the selected underutilized fruit with and without blending was analyzed for microbiological analysis for different storage intervals at fresh, quarterly, half-yearly. The standard plate count(SPC) was recorded. Results were reported as log CFU × dilution /ml of the solution.

Economics of the prepared products: The cost of production is an important parameter for the assessment of the acceptability of the new product to be consumed/ market. The cost of the product was determined by taking into consideration the cost of raw materials and overhead charges for the preparation of different value-added products.

Results and Discussion

The pulp obtained from Prunus Persica was used for the preparation of value-added products. The prepared product was evaluated for quality characteristics and consumers' acceptability in relation to different storage intervals. The relevant results obtained from the present study have been discussed under the following heads:

Specific characteristics

Data pertaining to fruit, flesh colour, shape, appearance, taste and flesh firmness of wild peach is presented in Table.

Table: Specific characteristics of wild peach

Fruit	Fruit colour	Flesh colour	Shape	Appearance	Taste	Flesh firmness
Wild peach	Greenish yellow	Yellow	Round	Fuzzy skin	Slightly acidic and slightly bitter	Soft and pulpy

Physical parameters- the results of selected wild fruit is as follows-

Length (cm)- 3.13

Breadth(cm)- 2.95

Weight(g)- 22.52

Specific gravity(g/ml)- 1.02

Quality evaluation of the product

The underutilized fruit selected is a good source of vitamins and minerals. Prunus persica is small in size and hasa pungent, acidic and bitter taste. So, the fruit is remained neglected due to their smaller size, bitter and astringent taste, and highly perishable nature. The pulp/juice obtained from these fruits is used to make RTS beverage and can be used in the home as well as in commercial scale to obtain the maximum nutrients.

Organoleptic evaluation- Data pertaining to sensory scores of wild peach based beverage as affected by storage is as follows-

Parameters	Storage(months)		
	Fresh	3	6
1. colour	8	8	8
2. Aroma	9	8.5	7
3. Taste	8	7.5	7
4. Flavour	9	9	9
5. Texture	8	7.5	7
6. overall acceptability	9	8	8

Microbial count of RTS beverage- Total bacterial count (log CFU/ml) in the product is as follows-

Product	Storage(months)		
	Fresh	3	6
RTS beverage	-	-	0.98

Economics of the product- The economics of the prepared product viz. RTS beverage in different proportions of wild peach: cultivated peach is as follows-

Product	Cost per product/lt/kg
RTS beverage wild peach: CP	
100:0	6.14
75:25	7.75
50:50	8.79

Conclusion

Conventional knowledge of Indian beverage preparation was successfully applied with required modifications for the preparation of good quality Himalayan Prunus Persica beverage. Further, there is more need for thorough screening of quality attributes of this fruit and the possibility of preparation of other value-added products from Prunus Persica by exploring knowledge of Indian recipes. Thus research and innovation as a part of higher education provide a successful launchpad for students to explore their research potentials and engage in vocational and income-generating activities.

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Role of Design Thinking for Enhancing Quality in Higher Education: A Dynamic Solution

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Abstract

While having the opportunity of performing the roles of an educator and a design entrepreneur, there arises an assurance to the fact that - the most robust mechanism for empowering young individuals and societies is ensuring that they acquire quality education throughout primary, secondary and tertiary levels of studies.And here, quality education is of the prime concern today, specifically in higher education with the rapid mushrooming of institutions across the country, quality control is the biggest challenge in the current educational scenario.The need of the hour is to recognize and meet the requisites of constantly evolving environments to further create relevant inclusions that are in vogue and getting rid of the ones which have out-worn.For walking on the path to enhance the quality of higher education, 'Design Thinking' comes across as an indeed viable and dynamic proposition. It deals with developing a 'design attitude' in the teaching-learning process.The Design Thinking approach has today evidently turned out to be efficacious in multiple disciplines beyond the classical design fields.Design thinking revolves around the vision to inspire creating a learning mindset that encourages prototyping and experimental methodology. It is ready to penetrate in different branches to craft an outcome that builds up creative thinking abilities, innovation confidence, and meaningful learning experiences.

With the implementation of this approach, higher education in India can look up to graduating more students with an intensifying focus on employment preparedness.

'Design Thinking' is ought to empower the students to discover a passion to create, innovate, prototype and solve the real-time problems with authentic skills and strategies across versatile paths they choose in life.The paper emphasizes on adopting methods to inculcate the design thinking process in higher studies, to help students to develop an empathetic, collaborative and open-minded learning methodology.This transformation shall lead to a more progressive and qualitative enrichment in the Indian tertiary educational scenario.

Design Thinking Transcends Borders

Introduction

Organizations of advanced education are searching for new ways to deal with retaining students, guarantee opportune movement and graduation, and amplify learning. College culture, structure and motivating forces can frequently cripple educational establishments, making it tough to focus on the tasks of the faculty and administrators in a significant manner.

As an educator, program leader and a design entrepreneur myself, there emerges a confirmation to the thought that the most vigorous system for intellectually engaging youthful individuals' is guaranteeing that they obtain quality training all through their essential degrees of studies.In the pursuit of inculcating and formulating creative learning techniques for 21st-century youth abilities, work suitability and education credibility, there has been, in the previous years, avid and extensive enthusiasm towards Design Thinking application as a revolutionary process in educational training.

The focus lies towards quality enhancement in the learning process at the tertiary education level, which leads to pondering over the possible solutions for improving an individual's learning attributes, knowledge, abilities, skills and potential.

In today's era of transition, where technological and social advancements are accelerating, globalization is marching at an exponential pace, constantly evolving stakeholder demands as well as student demographics- have led to the need for re-analyzing the redundancy and the addition of qualitative inputs in imparting higher education.

To deal with the current challenges in higher education, there is a need to develop a **'Design Perspective'** and ascertain what aspects require to be accomplished and the ways to effectively achieve them.

Howard Gardner, an American Psychologist and Educator, best-known for this theory of multiple intelligences, believed that the conventional concept of intelligence was too narrow and restrictive and that measures of IQ often miss out on other "intelligences" that an individual may possess.He suggested in his theory of multiple intelligences, that intelligence is formed out of multiple abilities and recognized eight intelligences: linguistic, musical, spatial, intrapersonal, interpersonal, logical-mathematical, bodily-kinesthetic, and naturalist.

Gardner defined – "An intelligence is the ability to solve problems, or to create products, that are valued within one or more cultural settings."

Efforts towards developing strategies that are more responsive to the new educational demands, thereafter designing the methods and implementing them in an innovative manner that leads to futuristic outcomes, growth of mindsets and progressive transformations.

This paper intends to explore and present the strategies in relation to the steps involved in the design thinking process.

Widening the Horizons

Empathize - Define

Higher education by its virtue offers an enormous expansion of one's academic skyline.

Being dove into an existence where a group of educators, individually teach students one aspect of study that they need to learn, as well as where the students hobnob with fellow mates from various zones of the world, with various backgrounds and perspectives for a noteworthy tenure in a relatively new setup - students are still yearning to learn their disciplines in a more dynamic manner with a broader outline, that makes above elements an advantage to their learning procedure.

In today's era, mainstream education is operating with unsuited perspectives, psyches and irrelevant learning patterns with respect to the current instructive materials, practices and organizations. This presents a persuasive foreground for restructuring the scaffolding of higher education in India.

A diversity of students is entering colleges & universities each day, coupled with an increase in technological innovations and globalization, therefore it has become more critical than ever to walk in the shoes of the pupils and develop learning avenues that appropriately utilize their skills and provide a constructive path for future. The blend of these variables frequently brings about a conventional

world view. Students have seldom had the opportunity to learn in surroundings outside the traditional classroom, library, or laboratory. Their imaginative mind is restricted by the absence of information and experience.

Educators time and again complain that even the extremely talented students get affected by a confined outlook of the world and a lack of ability to envision and track opportunities that lie beyond their immediate geographic and cultural skylines.

To put these concerns in context, it is imperative to comprehend the territory and the students that the higher education institutions serve.

For this, empathy is a beneficial aid for classroom management as it envisions fostering compassion as well as cognate traits among students in higher education and facilitating relationships between faculty members and administrators. Perceiving the elemental role that solicitous empathy involves in moral discourses and good working practices, researchers from different corners of expertise have been prompting educators to allocate more noteworthy concern towards empathizing mindset as an educative objective.

Breaking the Monotony

Ideate

The fundamental point of the Ideation Step is to utilize imagination and innovation so as to create variable options for the defined problem. By extending the space for generating solutions, the design minds will have the option to look beyond the standard techniques for taking care of issues so as to discover something better, increasingly exquisite, and fulfilling answers for issues that influence a client's understanding of a commodity.

Similarly, by focusing on interpersonal & relational insights in an educational set-up, is what drives social abilities and emotions like compassion and instinct to know about what motivates the students - a sort of understanding that is fundamental for educators to further ideate teaching methodologies for students according to their potential that helps broaden intellectual and cultural horizons and also benefits them in developing critical thinking and problem-solving skills.

Teaching concepts require to be designed as per the prevalent student mindsets, that is by engaging them in learning experiences outside the traditional classes, labs, or library setups. Teaching in zones outside the monotonous settings motivates the students to visualize & relate beyond their social comfort zones and thereby broadens their thought-process. Further, it enhances cognitive thinking abilities and subjective reasoning capacities by putting students in a practical mode for application of the knowledge that they obtained through learning in customary settings.

The design thinking & learning structure indicates that the — time frame, area, content, recurrence, and management — varies from the conventional learning concept. Design Thinking techniques generally indicate substantial time-frames and is conducted outside of the typical classroom structure, in the actual world.

Breaking the monotony involves the ability to generate ideas with different perspectives and handle the contradictions judiciously is important for the learning procedure to proceed. Students and educators must collaborate & coordinate disciplinary insights and substantial experiences.

Examples –
- to draft the curriculum of a program in relevance to the students' lives and expectations;
- to guide students in visualizing their personal experiences within the context of the larger social and conventional world;

- to augment student recognition of numerous viewpoints to carry out ideation from which further understand & solution shall develop;

- to assist students & faculty in coordinating new data with current information and practices;

- to motivate students towards a comprehension of the variety and complexity of variables that impact the decisions people make as well as cultural results;

- to guide students to synthesize multiple categories of knowledge (rational-analytical, behavioral, and affective) into an integrated whole.

When the Ideation session is finished, the thoughts & insights must be gathered, sorted, refined and categorized, so that the intended group can choose the best strategies, thoughts, solutions, and techniques from the prepared list.

Creating the Psycological & Physiological Architecture:

The Action & Review Arena

PROTOTYPE – FORMULATE – VISUALIZE: TESTING AND TRAILS

As per solutions derived at the Ideation, the stage can be applied in a model framework with a specific number of students in a specific time period. Example- Inclusion of Creative Lab periods in the student time-table with two guiding faculty/ lab members, where the students will be given the flexibility to attend and create. In this, the number of hours spent along with the undertaken project outcomes can be assessed and credited as a holistic part of the overall assessment. Here, the students are required to recognize issues and events, multiplicity and complexity of factors, that would, in turn, influence their project preferences and execution patterns, as an individual or as a team.

This eventually will lead to an aggregation of numerous skills like analytical, behavioral, spatial, logical, musical etcetera. Through the design thinking process, individuals tend to learn by observing, reflecting upon or contemplating the task undertaken, accounting the responses that the assignment evokes while performing the tasks.

The sorts of interactions that occur are not restricted to student-instructor association. Rather, proximity with other fellow-mates and society individuals prevail as well. The recurrence of student correspondence with one another and with educators escalates, in light of the fact that unanticipated questions or spontaneous situations that inevitably crop up.

Advanced media-rich digital learning stages, customized or versatile course-ware, and web conferencing apparatuses equipped for interfacing students for synchronous exercises are turning out to be normal answers for mixed learning practices.

Through the design thinking process, the educators and students assess learning through reading content, group discussions, and different exercises that look at the elements of knowledge, abilities, sentiments, and frame of mind procured from contemporary occurrences. Students can also gather and record the varied viewpoints through explicitly designed questionnaires.

Example: ISR Activity by Interior Design Students at Chandigarh University –

Renovating the classroom interiors for unprivileged girl child as isr activity by interior design department at Chandigarh University, Gharuan

At the time of curating an ISR educational exercise for the Interior Design students, a thought resonated in my mind towards blending design study teachings with a hands-on effort task that can bring a positive vibe & transformation in the lives of the underprivileged. And so further, the students and faculty members of Interior Design Department had put their heart and soul in bringing a wide smile on

every girl's face residing in that Orphanage, by carrying out an innovative activity held on 8th March'2019 on the occasion of WORLD'S WOMEN DAY, intending to celebrate the spirit of womanhood with the underprivileged girls and uplift their classroom interiors by embellishing the walls of the said space with specifically designed wall paints, mural, artworks along with motivational quotes whilst using the power of colors and patterns.

This activity was designed to impart collaborative planning & execution skills among the students along with the knowledge of the benefits of staying in neat, clean and aesthetically pleasing spaces.

An effort made to create an interesting and motivational environment for the orphan girls to stay cheerful. The design students learnt the importance of working as a team to create a worthy environment for the underprivileged society and the art of giving through this ISR activity.

Through the social service project, students became familiar with the essentials aspects of a community and upgrade their small-groups and administrative aptitudes as well as managerial abilities.

While concentrating on human communication in a conventional setting, students acquired authentic experience through assistance learning in social service settings that they might not generally have experienced.

Further, field trips like visiting historical centers, museums, art galleries, landmarks, significant structures and captivating regions are a piece of the movement study exercises. At the point when such travel activities are incorporated, the learning forms become steady with best practices in the design thinking process and respond effectively to the diversification of an individual's social and scholarly orbits.

Organized exercises outside the stereotyped study halls, libraries, or labs propel the learners to walk past their social comfort zones and accordingly widen their communal spheres. Eventually, contemporary activities in unconventional matrix give more extravagant experiential foundation whereupon subsequent impactful learning experiences can be built.

Redesigning Educational Spaces- Physical learning space design in higher education requires to focus on creating active learning zones with modern-day amenities such as - wireless bandwidth, flexible furniture, projectors & display screens, books/magazines/newsletters to refer, varied writing surfaces, audio systems, interactive labs, and ample power. Designing and assessing spaces that encourage dynamic yet collaborative learning and coordinated efforts, require funding and strategic layouts to revamp or on the other hand build contemporary common spaces, study halls, canteens, libraries, etc. in an inspiring & wondrous way where effective learning & interactions happens.

In Interior Design Department at Chandigarh University, we attempted to create conducive learning environments for the young design enthusiasts to generate ideas in harmonious spaces. The students are individually provided with ergonomic furniture like adjustable drafting tables with architectural fittings along with adjustable wooden stools with backrest to accommodate different human anthropometrics, which also relates to a part of design studies.

The Faculty also requires to be motivated to design learning platforms that involve computerized stages and to widen & innovate their educational methodology to incorporate coordinated efforts and student-focused learning configuration that will bolster the development of blended learning.

Hence, discovering unconventional strategies to get students to take part in the right kinds of activities helps to raise the level of skill-oriented learning & qualitative education.

Conclusion

These Design Thinking tools once implemented manifest an educational experience that is more meaningful for students and educators by widening engagement and making the learning process

more congenial and collaborative. They will emerge from these contemporary approaches with a more sophisticated understanding of different people and places, enhance their knowledge and skills and influence their attitudes.

These innovative efforts will instill deep-rooted values for the students and will also yield dividends to the community at large. Indian graduates will be better prepared to fulfill societal roles and to act in a dynamic environment embraced by change, diversity, and teamwork.

The benefits of Design Thinking skills for students are numerous. Design Thinking skills brings positive changes in student behaviors and develop their ability to apply insights, skills, and knowledge gained from a particular setup to heterogeneous situations.

With a gamut of practical hands-on experience in the world of work empowers students as they make the transition from the university into the workforce to meet challenges and achieve success in careers and occupations. The cyclic process of Design Thinking learning will produce pragmatic associations among students, working professionals, and educators, infuse novel ideas and perspectives into communities & organizations.

It is not just educating about design thinking as a mere concept, but to make design thinking a foundation process in revolutionizing the built-up of the higher education structure in India. It is fundamental both to emphatically regard the conceptions that the new-age students from varied backgrounds bring to the classrooms and to know about our own inclinations as educators towards our firmly held however unexplored convictions.

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Relevance of 7e Learning Instructional Model in Fostering the Integrated Science Process Skills

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Abstract

The present paper throws light on the relevance of the 7E learning instructional model in fostering the integrated science process skills among secondary school students.In today's science curriculum the constructivist approach as a teaching methodology is being implemented in the classroom with an objective to provide ample opportunities to the students to construct their own knowledge rather than becoming a passive absorber of science concepts.One of the constructivist approaches discussed in this paper was the 7E learning instructional model which has given due importance to the transfer of learning which is an essential component of science education.This paper explored various research studies which support that 7E learning model students' integrated science process skills can be enhanced.The results of other research studies conducted by different research workers have also been discussed in this paper. Furthermore, this paper revealed that the scientific competence of students, as well as teacher trainees, can be empowered by incorporating the 7E learning instructional model in the science curriculum.

Keywords: *Constructive approach, Integrated science process skills, 7E learning instructional model, Transfer of learning.*

Introduction

Education is a great leveler and provides the only sustainable route to reducedisparities. It has occupied a prominent niche in the national development agenda. The importance of education has been truly recognized in the education scenario and it has always been a key driver towards economic growth. The impact ofphysiological, philosophical, psychological and sociological change on education is so substantial that changes in educational theories and practices have become inevitable to reset the educational objectives with the growing needs of the society.In science education, the scope of science and its impact can be seen everywhere.The practical effects of science can be seen in motion everywhere, from path breaking discoveries in atomic science to discovery of new vaccines in life science, to technological advancements in the field of transportation, weather prediction and communication, it has left no aspect of human's untouched and thus science can be considered as a backbone for human survival.Ithas occupied a primeposition in the nations's growth and development (Odunusi, 2001).

Science can be defined as a practical and intellectual activity that includes systematic studying the structure and behaviour of the universe via observation and experiment.The science education in today's education scenario should aim at understanding the nature of science which can be learned by doing science or learning through science. Understanding the nature of science is also a necessary ingredient for

the full realization of a human being.In the post-independent India, our constitution adopted the goals of establishing the society based on the scientific temper, humanism and spirit of inquiry.It enshrines in Article 51A(h) of the constitution that it is the fundamental duty of every citizen of the country to inculcate, propagate and further disseminate the scientific temper in society (NCERT,2006).

The National Education Policy (2019) provides a framework for the transformation and reinvigoration of the education system in order to respond to the requirements of fast-changing, knowledge-based societies. An education system built on the premises of quality and equity is considered central to sustainable development, achieving success in the emerging knowledge economy and society.According to the MHRD report (2019) In school science education, scientific temper should be inculcated and evidence-based thinking should be encouraged throughout the curriculum which will lead naturally to rational ethical and compassionate students who can make logical and sound decisions throughout their lives.

NCF prepared by a working group of NCERT (2008) explicitly highlighted the importance of constructivism as a teaching approach for understanding the nature of science. Constructivism is a broader pedagogical approach used in science education. It brings about a paradigm shift from teaching to learning, focuses on knowledge construction rather than knowledge reproduction. By adopting such a pedagogical approach students will be able to understand various processes involved in doing science. The constructivism approach may act as a catalyst for the learners to understand the nature of science and it is based on a belief or philosophy that students are not empty vessels that need to be filled rather their prior knowledge acts as a strong background for learning new knowledge.

7E Learning Instructional Model

7E learning instructional model is a useful recommended teaching approach that is based on constructivism.Teachers should be encouraged to incorporate this innovative pedagogical approach into their teaching (Balta &Sarac,2016).The7E learning instructional model involves seven inter-linked phases which are explained as under (Eisenkraft, 2003).

Elicit phase

The main objective of the elicit phase is to provide an opportunity for the students to express their intuitive information or knowledge.This phase activates the existing knowledge of the students.During this phase mind map, the KWL chart, concept map, etc can be used in order to elicit the prior knowledge of the students.

Engage phase

In this phase, the students are engaged in a new concept by using short activities that prompt enthusiasm,curiosity, and attention towards new learning.In this phase,the student's previous misconception will be identified by the teacher.During this phase, students can be shown videos, articles, demonstration etc.

Explore phase

In the explore phase, students try to investigate the nature ofscientifically testable questions and generate their own set of testable questions, they can make certain hypotheses based on the evidence collected, record data, create graphs and interpret the data and finally organize their findings.

Explain phase

In the explain phase, students are presented with laws, models,and theories.The teacher provides guidance, helps them in building scientific vocabulary and provideswith certain questions that may help students use this scientific vocabulary to be able to explain the results of their exploration.Thestudents tend to conclude and present their findings.

Elaborate phase

In this phase,students tend to draw reasonable conclusions from the evidence and the data collected, deepen their understanding of principles or theories and processes.

Evaluate phase

In this phase the students try to demonstrate how well they will apply their understanding for carrying out their own scientific investigation.Student's understanding can be ascertained by providing mind maps, concept cartoons or KWL chart to complete the information they have learned during the process.

Extend phase

In this phase students are challenged to apply or extend their knowledge or understanding in a new context, compare and contrast their ideas, principles or theories with the previous knowledge.

Integrated Science Process Skills

With the scientific and technological advancement, there is a growing need for students to adapt to the changing needs and demands of society.Students should be taught how to think in the light of science rather than simply memorizing the scientific facts (Cerit,2008).The science education is not aimed at growing every student to be a pure scientist but to provide them with multi-dimensional thinking and understanding the ways like scientists do(Duran and Ozdemir,2009).To achieve this objective, science process skills play a vital role as it provides the learners to produce scientific information as well as to learn the nature of science via observing and experimenting.

Integrated science process skills are considered as series of inter-linked, rational activities performed to attain certain products or a goal.It involves a range of skills suchas predicting, making inferences, drawing conclusions etc.Sheeba (2013) Science process skills are a set of transferable abilities , appropriate to many science disciplines and reflective of the behaviour of scientists.Anderson (2002) found out that science process skills play an important role in promoting science literacy.In the same vein, Turiman, Omar, Daud and Osman (2011) established that science process skills should be acquiredby the students to promote their higher order thinking skills and better cognitive skills consequently leading to development of scientific literacy.

Review of Researches

Various research studies reviewed that the instructional material prepared using 7E model was successfully able to enhance the integrated science process skills of school students (Shaheen and Kayani,2015; Maulida, Endang and Fitrihidajati,2013;Gok, 2014; Wijayanti, Hartono and Rachman,2014; *Alwanan and Supardiyono, 2019)*. Research study conducted by Indrawati, Suyatno and Yuanita (2017)) reviewed thatthe implementation of 7E learning model was able to improve the student's concept mastery and critical thinking ability.Erlina(2016) advocated that the physics course material developed in accordance with 7E learning model was effective in enhancing the problem solving ability of high school students.

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Trending Information and Communication Technology (ICT) In Shaping Higher Education

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Abstract

Education is dynamic as it changes from time to time. The purpose of education is to bring about desirable change in the behaviour of people. In a country like India where the literacy rate was very low, the government succeeded to increase the literacy rate to 72.98% (as per census 2011)

As per a report by UGC, 2019, at present, there are 920 universities in total including central, state, private and deemed to be universities. As education is dynamic, now education is more andragogical than pedagogical and this is being due to more technological advancements. Technological advancement has played a key role in the transformation of higher education. There has been an exponential improvement in education due to technology usage by the students as well as by the teachers.ICT has become an integral part of today's teaching-learning process. In face to face teaching, most of the time is consumed for the input-output and less time is left for the process. But in teaching with ICT the input and output time is reduced and process time is increased. When the process time is increased, time of students' activities, discussion, correlation with other subjects, brainstorming and learning, etc will increase. The term Openness is introduced where Education is sharing knowledge and information. OER, Open Access (OA), Open Source and Massive Open Online Courses (MOOCs) are regarded as forms of openness. As every coin has two faces use of ICT has its own disadvantages as well. Vulnerability to misuse, unreliable information resources, technological failures, etc., are some of its disadvantages.

But undeniably, ICT has influenced the teaching-learning process and is playing a major role in shaping higher education in India.This paper explores the basic understanding of ICT and its role in higher education as well as its application.

***Keywords:** Higher Education, ICT, UGC, e-learning, MOOC*

Introduction

Education and learning, both formal and informal, have a central part to play in developing Knowledge Societies. ICT, including the Internet, has opened up new possibilities for everyone, whether in school or lifelong learning, to access information, ideas, curricula and tools that previously were unavailable to them. Distance learning can bring higher standards of education to remote and underserved communities. ICTcan put learners themselves at the centre of the educationalexperience, developing their own knowledge and skills with the support of teachers and others in their networks. Their ability

to develop information into knowledge and knowledge into activity and innovation will be critical to the potential of Knowledge Societies to enable prosperity, inclusiveness, and sustainability (UNESCO, 2015).

Higher Education is defined as the education, which is obtained after completing 12 years of schooling or equivalent and is of the duration of at least nine months (full time)or after completing 10 years of schooling and is of the duration of at least 3 years(12).

A centrally sponsored scheme Rashriya Uchchattar Siksha Abhiyan (RUSA) was initiated in 2013 that aims at providing strategic funding to eligible state higher educational institutions. A statutory body named UGC is already working since 1956 taking care of coordination, determination, and maintenance of standards of higher education.

India's youth population stands 34.8% of the total population (Census 2011). To cater to the growing need for their educational requirement, the number of educational institutes should also increase. Presently, the demography of a higher education institute is as shown below:

Here is a diagrammatic representation of the growth of higher education institutes in India:

Source: Annual Report, UGC

Despite these increasing figures, the requirement could not be met by these traditional institutes. With the emergence of technological advancements, higher education is changing its face from traditional ways of teaching to the technology-based system.

Information and Communication Technology (ICT): an introduction

It is the combination of Computer Technology, Communication Technology, and Information Management Technology.

To understand ICT, first, it is required to understand certain basic terms which are as follows:

Data is the raw facts and statistics collected together which is further turned into information through processing.

OER refers to any educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are openly available for use by educators and students, without an

accompanying need to pay royalties or license fees(Butcher, 2011). OER can exist as smaller, stand-alone resources(reusable learning objects), that can be mixed and combined to form larger pieces of content or as larger course modules or full courses. OER can also include simulations, labs, collections, journals, and tools. These materials are considered open if they are released under an open license such as a Creative Commons license.

Massive Open Online Courses (MOOC's) are online courses designed for a large number of participants that can be accessed by anyone anywhere, as long as they have an internet connection. They are open to everyone without entry qualifications and offer a complete course experience online for free. They are led by subject matter experts from higher education or industry and hosted by learning management systems or dedicated MOOC platforms(Witthaus et al., 2016). Some examples are e-PG Pathshala, agMOOCS, SWAYAM, NPTEL.

m-Learning is learning via mobile phone through SMS, MMS, voice mail, podcasting, online chatting, video conferencing, etc. There is about 50% mobile phone accessibility in India as compared to more than 53% globally which is not a bad situation and that makes m-Learning a better option to harness.

Website is a collection of interlinked web pages typically hosted from a single domain. A website is accessible over the internet or a private network such as LAN though URL(Uniform Resource Locator). Its contents are visible to everyone, no login is required and it is the same for all users. It is one way and traffic is very high.

Web portal is a personal location on the internet that can be reached only with user id and password. It provides a single point of access for contents from various sources and acts as the gateway to a specific knowledge domain. There is two-way communication between user and portal. Regular updating of information sources is its feature.

Weblog commonly known as the blog is a frequent, chronological publication of personal thoughts and web links. There are certain free blogging platforms for teachers and students namely Edublogs, Blogger. com from Google, Wordpress.

BYOD is an acronym for Bring Your Own Device. This method is a very effective way to use your own personalized device during classroom learning, which could be used anywhere, anytime with flexible learning and more digital fluency. Some examples of internet-enabled devices are iPod Touch, iPad, smartphones, laptops, netbooks, e-readers, etc.

In higher education, it has a threefold impact.

- Firstly increases the number of devices that can be used, to enhance learning.
- Avoids unnecessary spending on hardware resources, and this finance can then be re-diverted to other areas of ITC development.
- Avoids the doubling or sometimes tripling upon the devices, wherein education institution a computer is redundant for much of the day.

Higher education institution (HEI)

Higher education institutions (HEI) try to find a way to respond to new challenges, including quality issues, a growing number of students and the current change of the educational paradigm, which urges them to revise their mission and functions (Coiffait, 2014; Rathenau, 2014).

At higher education institutions, one of the key skills to be acquired is 'Learning to learn using the expending technological possibilities'.

The European Commission "Future of Learning" report stressed the additional and enabling value of ICT for education which is as follows:

- ICT will change what, how, where and when people learn.
- Due to the ubiquity of technology and its power to facilitate highly dynamic, adaptable and engaging virtual learning environments, personalized lifelong learning opportunities will become feasible.
- ICT will enable teachers to better respond to diversity and heterogeneity in the classroom and to adapt learning material and objectives to individual students' learning needs.
- ICT will furthermore support lifelong learning opportunities that smoothly integrate into people's lives and allow them to adapt their training objectives, schedule, and pace to individual needs and preferences.

The report recommended educational and training institutions to promote tailor-made collaborative learning opportunities that are adaptable, challenging, relevant and enjoyable, open access and basic digital skills need to be fostered. The report recommendations were extended to policymakers who would need to ensure that all citizens will be able to benefit from the opportunities offered and that more vulnerable groups are equipped with the necessary skills to participate in learning activities that are more and more technology-based (Redecker et al., 2011).

Shaping the future for ICT in higher education: the conclusion

Higher education institutions are conservative and are reluctant to change rapidly. Open and Distance Learning are not always considered credible by traditional institutions. But step by step changes are coming gradually, and adoption of effective use of ICT and open educational resources is taking place at a faster pace.

It's a time for teachers and students to be familiar with technical innovations related to ICT, but fast changes in rules are not good in this case.

- HEI should create a suitable working environment for teachers and implement their ideas. They need to create an environment where teachers and students can be flexible and adapt more quickly.
- The faculty has to manage the process of change elegantly to avoid resistance.
- The best way for faculty to go about what is needed is to work collaboratively and across disciplinary boundaries. This does not happen on many campuses but is needed in order to make instruction more relevant, authentic, and applicable to specific contexts in which students will ultimately deploy knowledge.
- The role of the future teacher would be more of a facilitator of learning with technology-enabled skills-focused more on learning and less on teaching.
- They need to recognize that they are learning partners with their students rather than deliverers of knowledge as before.
- Future teachers will need to work in teams to interact efficiently across technological platforms and to develop coherent programs of study that guide students.
- Teachers will have to multitask and may have to provide human touch/elements in virtual teachers.

Finally, it is concluded that for shaping the future of higher education, trending ICT is the need of the hour. For that teachers and trainers needed targeted training, enabling them to align pedagogy and technology to the benefit of their learners.

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Attributes and Initiatives taken for Entrepreneurial Development in Higher Education

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Abstract

According to the All India Survey on Higher Education (AISHE)2019, there are about 993 universities, over 40,000 colleges out of which 298 universities have affiliating colleges constituting to 78% arefrom the private sector. This forms the real Higher Education pyramid in India. A major revolution in this system is required and is a major challenge in the present scenario is that future jobs and skills are changing with the advent of new technologies.Higher education and economy are deeply interrelated. The development from an agrarian society towards an industrialized society has resulted in a vast change in the economic, social, educational and even the philosophical aspects of life. The pragmatic philosophy has changed the educational mission, curriculum programs, course objectives and the educational outcomes of the students.

Developing employability skills has been a major challenge for all higher education institutions. Dynamic job markets make it very imperative for the candidates to possess employability skills as well as entrepreneurial skills too. Over the years, a large number of programs and schemes have been formulated and implemented for improving the standard of education.Employment has become the keyword for all the passout graduates due to which higher education in India has undergone a huge transformation. In spite of phenomenal growth in the number of higher education institutions and the number of graduates, industry and corporate sectors face problems to find the right candidate for diverse jobs with different degrees of complexity.As there is a big gap between the requirement of the organizations and that of student qualification domains and due to the mismatch,there is a dire need to generate adequate employability and entrepreneurial skills in the students through Higher Education.

There is a huge challenge before the higher education institutions to equip their students not only with the expertise derived from the traditional courses but also to give their students a sufficient range of transferable skills. The thrust of education is thus changing from idealism to pragmatism based on employability demands.

Introduction

Education, as a verbal skill of mastering some odd facts and figures and then reproducing them in the examination, is one view, whereas taking it as an intellectual comprehension and moral force to transform the individual and society is quite another. It is highly doubtful if as a nation we have clearly

developed a clear cut image of education as an instrument of social change or if as teachers we have made a serious attempt to lay bare the complex problems of social change in the context of our history and cultural traditions.Higher Education has attained paramount importance as it paves as a gateway to social mobility. In the changing educational scene, there is a need for greater awareness and knowledge about the teaching learning process and how to make it a success. The best educational institutions are in the process of witnessing a paradigmatic shift from teaching students to students learning.

Our education must make a teacher something more than a mere imparter of knowledge. He must have the feel and faith in himself that he completely understands the intricacies of educational processes and has an active hand at his level in molding the educational process. This requires a constant review of our academic and administrative set up from the primary level to the highest to be able to provide matching remedies. Creativity and experimental daring are essential components for educational and social progress. It is very convenient for a teacher to deliver a lecture and give pearls of wisdom in the class and the students to take down the notes. However a teacher must teach and also enable the students to learn, become employable or turn into an entrepreneur. A teacher's responsibility is to facilitate this process. Besides facilitating student learning, it is also necessary to grab and retain the interest of the students in the subject.

The image that a teacher has of himself and the one that the nation has of him determine to a great extent the process and the product of education. In the higher education system, teachers have a dual occupation, that of an instructor and also that of a researcher, the former focused on communicating knowledge and the latter striving to push back the frontier of knowledge.The broad aims of higher education are to provide a sense of perspective, to help understand the cultural problem of social change and social control, to facilitate cross fertilization of natural sciences, social sciences and humanities so that the students are able to move from one branch of knowledge to another, thus making of interdisciplinary understanding of the problem. In any case, it cannot do without disciplined and systematic thinking.

India's higher education system is structurally flawed and underfunded.The crisis will cause an effect on innovation and human capital, the two pillars of labour productivity and GDP growth.It will also hurt India's largest demographic of its potential.The government needs to ensure that higher education's role in innovation and human capital is not ignored.The reforms must be pushed through and must lead to legislation that will fund research based organizations. Only this can bring a culture of discovery and accountability to India's higher education institutions.

Five parameters are used to rank higher education in India:

- Teaching, learning and resources

- Research and professional practice

- Graduation outcomes

- Outreach and inclusivity

- Perception

Employability, Entrepreneurship and Education

The link between employability, entrepreneurship and education is specifically valid for modern India. Employability implies the capacity of the graduates to function in a job and not merely the acquisition of a job. Higher-order skills enable them to select, adapt, adjust and apply other skills in different situations in different contexts. It is a part of the curriculum objective by insuring the discipline content of the program, disciplinary skills, workplace experiments and experiences as well as generic skills.It is a complex phenomenon and is displayed by students with respect to specific circumstances. They may generate the ability to

- To take appropriate action as and when required

- To explain what they want to achieve

- To work and live effectively with others and exhibit a teamwork

- To learn from other's experiences

- To associate with others in a diverse and changing society

Hence it is dependent upon a combination of factors such as personal attributes and competence as well as marketability.

Entrepreneurship is a concept or competence in a wider framework. It is applicable in all spheres of life. It enables personal development, social development as well as capacity to enter the job market as employee or self-employed.

These twohave become an important part of the national and educational strategy to solve the situation of unemployment. It will target the marginalized and unadvantaged sections of the society to contribute well in nation-building.

Attributes and Initiatives taken for entrepreneurial development in Higher Education:

A deep sense of imagination and an attempt to transform the imagination into a reality is the most important attribute of an entrepreneur. Through a habit of looking, examining, dreaming and creating, an ordinary person turns into an entrepreneur. From recycling to value addition to enhancement of shelf life, anything under the sun may be a subject dear to the entrepreneur. A good entrepreneur should mimic nature , not products made by others. This makes a difference between a good entrepreneur and an ordinary one. There is a need fora large number of committed risk-taking individuals who will contribute to the development of the country and create jobs. Only through such a transformation, it may be possible to make a turnaround or a change in mindset. Budding entrepreneurs exhibit some of the following attributes:

- Germination, incubation and innovation of ideas

- Skill, scale and speed of action

- Determination and appropriate action

- Creation and construction of novel aspects

- Risk taking capacity

- Feel of the respective field

- Honest connection and passion

For the same, the programs in higher education need to be structured so that they may help in Systematic thinking (to see the part in the context of the whole)

- Experimentation (trying out alternate ideas)

- Collaboration (communication and team working skills)

- Abstraction(to relate empirical data to theory)

Institution initiatives proposed to improve academic focus on entrepreneurship development of students are

- Increased focus on field projects

- Inviting young start-up icons so as to learn from failures and successes

- Rigourous and structured internship programs

- Participation of students in out of institution competitions and events
- International exposures
- Short term courses or training
- Mentoring support outside classroom teaching

Institution initiatives proposed to improve academic focus on entrepreneurship development of teachers are

- Faculty development programs
- Web platform for mentor's interaction
- Building and enabling ecosystems on campus
- Industry academia forum
- Entrepreneurship mentors pool
- Ideation labs
- Prototyping facilities
- IPR Cell
- Technology Business incubation
- Start up Acccelerators

Conclusion

Higher education in any country is characterized by infusion of novel ideas and their reasonable implementation, innovation, and sustenance. Employability and entrepreneurship are issues of an intricate nature. On the same note, the curriculum should entirely not be skill-based and job-oriented only. There should be a fine balance between theory and application, and between liberal and job-oriented education. Secondly, the character of a university is different from that of a college. While a college can pursue job-oriented education a lot more vigorously than a university, the latter, because it iscommitted to the pursuit of knowledge as such, cannot and should not promote job-oriented education in a full-fledged manner, like its counterpart. But there is no denying the fact that both colleges and universities should nurse students' dreams and aspirations that theirdegrees will eventually translate into jobs.Higher education institutions need to offer innovative programs that should focus on helping students understand entrepreneurial skills as well as imparting first-hand experience to the students.Continuous innovation and sailing through the unknown water will be the norm for survival. The students have to play their part by thinking out of the box and that is true for higher education institutions as well. Young Indians must take challenges, to face the adversities and to proceed. As Swami Vivekananda said, "Uttisthsto, Jagrato, PrapyoBaranNibodhato."

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Incorporation of ICT in Higher Education – Its Impact and Challenges

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Introduction

Information and communication technology (ICT) has become, within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing, and numeracy. UNESCO (2000) aims to ensure that all countries, both developed and developing, have access to the best educational facilities necessary to prepare young people to play full roles in modern society and to contribute to a knowledgeable nation. In fact, Information and communication technologies (ICTs) are a major factor in shaping the new global economy and producing rapid changes in society. At the same time, ICT adds value to the processes of learning, and in the organization and management of learning institutions.

The integration of ICT in higher education is 'inevitable'. ICT has become commonplace at home, at work, and in educational institutions. The use of ICT, including the Internet at home and workplaces, has increased exponentially. Although the use of ICT is not the panacea for all the challenges faced by higher education systems in the region, it does leverage and extend traditional teaching and learning activities, and has the potential to positively impact on learning. Furthermore, ICT is becoming increasingly ubiquitous within higher education, and it has been used far beyond enhancing teaching and learning to include promoting research, scholarly community engagement, and administration. In addition, the integration of ICT in higher education is also moving beyond getting personal computers into the hands of learners and towards mobile technology, virtual world, and cloud computing, among others. Thus, higher education systems in the region have to be innovative and leverage the developments in ICT to lead by example in using these cutting-edge technologies to provide more accessible, affordable, effective and efficient higher education.

In the past, lecturers in higher education institutions comprised only of people with the appropriate postgraduate degree qualifications. However, an ICT rich learning environment allows institutions to broaden their academic staff beyond this group of people. More diverse individuals such as trainers, mentors, and experts from the workplace can now be part of the teaching and learning process, supporting students in a variety of flexible settings. There are also opportunities for lecturers from different institutions and different locations to share their experiences and expertise in a course. In addition, lecturers now have different responsibilities and also require new skills with high levels of ICT, and need to be facilitative rather than didactic in teaching. Moreover, various higher education institutions are using ICT to develop course materials, deliver and share course content, lectures and presentations, facilitate communication among lecturers and students, encourage pedagogical innovation, increase cooperation and collaboration, conduct research, enhance professional development, and provide administrative and management services.

ICT Integration to Support Students' Learning

The use of information and communication technology provides ample opportunities for students to broaden their learning skills and for teachers to develop better multimedia and interactive courseware. Studies indicate that learning takes place through communication. This is generally poor in the classroom model. Classroom models are largely "one-way teaching models" in which the teacher plays the acting part whereas pupils and students are merely reacting. Computer-assisted instructions can greatly complement traditional teaching techniques to help students to learn much more much faster. Internet and Intranet have become a source of a vast amounts of information and interactive tools. Intranet is a closed user-group Internet. An example of an Intranet could be a college campus network where students and teachers share local information such as teaching materials and course schedules while at the same time accessing the Internet. Information on the Internet could be accessed from any location regardless of the type of computer system being used. It also means one can have access to and/or publish information regardless of the subject, location, age, race and time limitation. Internet is thus an empowering tool for all that are involved in education. Among the reasons that contribute to student motivation, there is the fact that these technologies can be a a key vehicle for stimulating learning, primarily because they create environments and present content in ways that are more engaging and involve students more directly than do textbooks and more traditional teaching tools. They possess an interactive capacity and they allow vocational and technical students to take part in activities that invite them to create and share with others.

Impact on teaching-learning through ICT

Information and communication technology (ICT) is an indispensable part of the contemporary world. The field of education has certainly been affected by the penetrating influence of information and communication technology worldwide and in particular developed countries, ICT has made an impact on the quality and quantity of teaching, learning, and research in the traditional and/or distance education institutions using it.In concrete terms, ICT enhances teaching and learning in higher education through its dynamic, interactive, flexible, and engaging content. Furthermore, information and communication technology has the potential to accelerate, enrich, and deepen skills; to motivate and engage students in learning; to help relate school experiences to work practices; to help create economic viability for tomorrow's workers; contributes to radical changes in colleges; to strengthen teaching, and to provide opportunities for connection between the higher education institutionand the world. The pervasiveness of ICT has brought about rapid technological, social, political, and economic transformation, which has eventuated in a network society organised around ICT. In addition to some of the impacts mentioned above, some of the definite and specific reasons for implementing ICT-based technology for higher education teachings are:

- New ICT facilities allow students and teachers to control, manipulate and contribute information to learning and teaching environments as interactive books, journals and the like are usually made available via the Internet

- The use of new multimedia technologies and the Internet will improve the quality of teaching-learning elated activities worldwide

- As a social process it will facilitate interaction and collaboration not only among learners but among teachers as well both at local and/or global levels

- It will give an opportunity to individuals who might wish to combine work and learning at his or her own pace, irrespective of location.

- It enhances the performance of lecturers in time of course materials delivery and provides maximum

attention to their students as they could meet through email feedback facility or otherwise.

- It will revolutionize distance learning which used to be "just-in-class" to "just-in-time", thus enhancing easy accessibility to education.
- A flexible user interface, since it is attractive and interactive, may motivate the learner's interest, which in turn will sustain continuous learning.
- It promotes human resources capable of responding to the demands of the new world economy that is supported and driven by ICT.
- Open and distance university education, if well supported by e-learning technology, will provide accessibility, flexibility, and collaborative work to both the urban and rural populace in general, who might not have the privilege to attend conventional universities. This has lifelong value to quality education and to all who seek knowledge irrespective of age and/or geographical location and time.

Therefore, with the evolution of the new Information and Communication Technology, higher education institutions are able to provide a flexible and more open learning environment for students and teachers alike.

Potential Challenges to Using ICT in Education

While using ICTs in education has some obvious benefits, ICTs also bring challenges. First is the high cost of acquiring, installing, operating, maintaining and replacing ICTs. While potentially of great importance, the integration of ICTs into teaching is still in its infancy. Introducing ICT systems for teaching in developing countries has a particularly high opportunity cost because installing them is usually more expensive in absolute terms than in industrialized countries whereas, in contrast, alternative investments (e.g. buildings) are relatively less costly. In addition, teachers with a lack of experience using ICT tools may find it difficult to incorporate this practice into their lessons; sometimes setting up the devices can be troublesome, to say nothing of limitations of budget and, thus, inability to afford the latest IT devices. Besides, ICT may limit students' imagination, critical thinking, and analytical skills. Computer-based learning has negative physical side-effects, such as deteriorating eyesight or backache. The problem of plagiarism is very common asmany students tend to focus on copy/paste from the Internet and find it difficult to generate their own ideas. Some major drawbacks for using ICT in higher education as following:

- It may create a digital divide within the class as students who are more familiar with ICT will reap more benefits and learn faster than those who are not as technology savvy.
- It may shift the attention from the primary goal of the learning process to developing ICT skills, which is the secondary goal.
- It can affect the bonding process between the teacher and the student as ICT becomes a communication tool rather than face to face conversation and thus the transactional distance is increased.
- Also, since not all teachers are experts with ICT, they may be lax in updating the course content online which can slow down the learning among students.
- The potential of plagiarism is high as the student can copy information rather than learning and developing their own skills.
- There is a need for training all stakeholders in ICT.
- The cost of hardware and software can be very high.

Conclusion

The increasing use of information and communication technologies (ICTs) has brought changes to teaching and learning at all levels of higher education systems leading to quality enhancements. Traditional forms of teaching and learning are increasingly being converted to online and virtual environments. There are endless possibilities with the integration of ICT in the education system. The use of ICT in education not only improves the classroom teaching-learning process but also provides the facility of e-learning. ICT has enhanced distance learning. The teaching community is able to reach remote areas and learners are able to access qualitative learning environment from anywhere and at any time. It is important that teachers or trainers should be made to adopt technology in their teaching styles to provide pedagogical and educational gains to the learners. Successful implementation of ICT to lead change is more about influencing and empowering teachers and supporting them in their engagement with students in learning rather than acquiring computer skills and obtaining software and equipment. ICT enabled education will ultimately lead to the democratization of education.

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Women Empowerment through Higher Education

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Abstract

India stands second highest in the density of population in which 49% of females from major human resources next to men. The role of women empowerment is always related to education. In fact, higher education for women plays a vital role in making women empowered. Here the words of the Pandit Jawaharlal Nehru are relevant to discuss. According to his words "if a woman educated, can able to make her family educated thereby can become empowered."

Indian women have undergone various problems like illiteracy, lack of family support, gender bias, ever-increasing population, improper distribution of funds, demand for exceed the supply, faulty education policies, poverty & high fees, the approach of educator and high authorities selfish &ineffective supervisory bodies, non-involvement of citizen, indifferent attitude of rural population, political & bureaucratic involvement, etc.

In spite of many provision in the constitutions of Indian such as mentioned about equality for women in its preamble, fundamental rights. There has been a dearth of women's participation in public life even after the successful launch of liberation, globalization and privatization concept. Hence the prevent poster focuses on Indian women and their empowerment through higher education. For empowering women, higher education will play a vital role.

Female education in Indian is not a gift of modern civilization. India has always been a relentless champion of the cause of women at all international and national front. Women's education in modern India is traced back to the years after the independence of India. In present times, the government of India takes measures to provide education to all women in the country. Women's literacy rates are seemingly rare in modern days. This has actually helped women to achieve top positions inthe workplace and also in society.

Keywords: Women empowerment, Problems, Higher education, Modern civilization.

Introduction

According to Dr. James Kwegyir- Aggrey "if you educate a man you educate an individual but if you educate a woman you educate a family".

According toSwami Vivekananda- To educate your women first and leave them to themselves, they will tell you what reforms are necessary.

Always an empowered woman is independent because of the knowledge and skills. An empowered woman doesn't mean that she is highly educated with employment rather along with it she should be rational, intelligent and skillful. In India, since the time immemorial women are treated as inferior to men within the patriarchal system of society. They were away from all the rights like education, voting, participation in public life, etc. In general, they were stuck on to the traditional role of women within the four walls of a house because of the rigid system of traditions and always led secondary life. In this situation giving importance for female education was like a mirage. When a woman is empowered, she can able to take any decisions based on her own ability. The Oxford Dictionary defines 'empowerment' as 'to make stronger and more confident especially in controlling their life and claiming their rights. Education is an important factor for the development of every nation and its human resources too. From the last few decades importance is given foreducating women out of her role as a homemaker. This traditional role of women has undergone a gradual change in primary education and higher education.

Objectives-

- To study the necessity of higher education in women's life.

- To analyse the relationship between women empowerment and higher education in India

- To focus on women's role in building up of its economy,Necessity for Education of Women &Obstacles in the path of women empowerment.

Methodology

The present paper entitled 'Women empowerment through higher education' analyses secondary sources and presented in a descriptive way. Through the process of analysis, it presents the role of higher education for women to be empowered and its significance.

Review of literature

Mukhopadhyay (2008) investigated the role of education in the empowerment of women in the District of Malda, West Bengal. The study took in 42 villages of Malda. On the basis of the study, it is concluded that women's status is inferior to men in Malda District. Further, it is found that education emerges as the single most important parameter in empowering women and the path for economic empowerment which can uplift the status of women.

Bhat (2015) analysed that education is a milestone of women empowerment as it provides them to respond to the challenges to confront their traditional role and change in their life. Further, the study added that education is the most powerful tool to change the position of society as it brings a reduction in inequalities and acts as a means of improving their status with the family.

Agrawal and Kukreti (2016) analysed the role of higher education in women empowerment by identifying the greatest hindrance in the path of women empowerment. The study is theoretical in nature and the source of data collection is secondary. On the basis of the study, it is concluded that there is no doubt about the essential need of empowering women through higher education. Further, it is mentioned that only literacy is the only solution for empowering women.

Halakerimath and Danappagoudra (2018) studied the empowerment of women through education in the area of Hubli-Dharwad. The sample size of the study was 50 women only. The data collected were tabulated, analyzed by using percentage,index and correlation. The findings of the study concluded that to educate women ata higher level, improve the social participation and status of women in society. Education provides knowledge of good decision-making skills and management resources.

The Constitution of India

- Guarantees free primary school education for both boys and girls up to age 14.

- Education in India plays a vital role in the overall development of the country. This proves that educated women promote education in their families.

- The government of India has recently launched the Saakshar Bharat Mission for female literacy. This aims to reduce female illiteracy.

Government Strategies

Right and Privileges:

The constitution of Indian not only grants equality to women but also empowers the state to adopt measures of positive discrimination in favour of women for neutralizing the socio-economic educational and political disadvantage that they could be facing.

- Article 14 confers on men women equal rights and opportunities in the political, economic and social spheres.

- Article 15 prohibits discrimination against any citizen on the grounds of religion, race, caste, sex etc.

- Article 15 (3) makes a special provision enabling the state to make affirmative discrimination in favour of women.

- Article 39 (a) further mentions that the state shall direct its policy towards securing all citizens men and women equality, the right to means of livelihood.

- Article 39 (c) ensures equal pay for equal work.

- Article 42 directs the state to make provision for ensuring just and humane conditions of work and maternity.

- Above all the constitution imposes a fundamental duty on every citizen through Articles 15 (a) (e) to renounce the practices derogatory to the dignity of women.

Government Planning for Girls Education -:

- The National Plan of Action for Women (NAP) adopted in 1976 became a guiding document for the development of women till 1988 when a national Perspective Plan for Women was formulated.

- The National Perspective Plan For Women (NPP) (1988-2000) draftedby a core –Group of experts is more or less a long term policy document advocating a holistic approach for the development of women.

- "Shram Shakti" the report of the National Commission on self employed women and women in the informal sector (1988) examines the entire gamut of issues facing women in the unorganized sector and makes a number of recommendations relating to employment, occupation hazards, legislative protection, training and skill development, marketing and credit for women in the informal sector.

- The National Plan of Action for the Girls Child (NAP) 1991-2000 is an integrated multi-sectoral decadal plan of action. For ensuring survival, protection and development of children with a special gender sensitivity built for the girl child.

- In addition to these, there are many other women related Policies like the National Policy on Education (NPE) 1966, National Health Policy (NHP) 1983, National Commission for Women's Act (NCW) 1990, which have been influencing the welfare and development of women and children in the country.

The factor for Poor Literacy Rate-:

• Gender-based inequality is highly prevalent in India. Women and girls are not treated on par with the men or boys. The mindset of people, that a girl child is a burden is changing.

• Occupational of Girls as Domestic help most young girls from rural areas are made to drop out of school and made to work as domestic servants. This is why there is such a high rate of dropouts from school.

• Other Reasons for Exploitation, Sexual abuse is one of the other reasons why parents do not send their daughters to school.

Necessity for Education of Women-:

• Empowerment of Women
• Economic
• Increase in the Revenue of the Family
• Check the Social Evils
• Part in Household Activities

Obstacles in the path of women empowerment-:

• Social Norms
• Workplace Sexual Harassment
• Gender discrimination
• Child Marriage
• Crimes against Women

Conclusion

The emphasis of this study is to know about the role of higher education in women empowerment. Higher education was recognized as a powerful instrument of social-economic advancement of the society in general and a vehicle for upward social mobility for deprived and marginalized sections in particular. The role of higher education in bringing out the importance of women and their position in Indian society. The grant or financial support and the support of the family are like a catalyst in bringing the change in the status and position of women in society through the promotion of education. The study also discussed obstacles such as social norms, workplace sexual harassment, gender discrimination, child marriage, etc. in the path of women empowerment.

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Nutrition Softwares and Quality Enhancement in Higher Education

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Abstract

New programs and providers of education have begun to emerge within and in partnership with institutions, offering new models of learning opportunities (Office of Educational Technology, 2017) and amongst them, one is the use of nutritional software like Dietcal by AIIMS Professor, Dietsoft based on Indian Data (NIN, ICMR, IFCT 2017)or mobile app like Nutrify India Now by NIN institute are to name a few.

This technology has accommodated the needs of a broader range of students. It revolutionizes the delivery of education, which allows access to higher education to greater numbers of students at a lower cost and with more flexibility. Colleges, universities, and other education providers are considering how to offer programming at various times and through multiple means of delivery such as online, mobile, and blended.Not only students but it also enable advisors, teachers, and nutrition experts to help and facilitate progress through changing needs and circumstances, as any recent changes are immediately updated (Office of Educational Technology, 2017).

According to the google play store, the downloads of mobile apps like Nutrify India Now have exceeded 10,000 downloads indicating its popularity amongst nutrition enthusiasts and justifying its role in higher education.

Keywords:Higher education, Technology, Online, Students.

Introduction

With the initiation of the twenty-first century, new and rapidly improving technologies are in the process of transforming higher education. Modern technologies have been considered to change the conception of a higher education institution. For example, now higher education institutions not necessarily need a physical place with classrooms and residence halls where students come to pursue advanced education.

- **The compelling need for nutrition software:**

  With sophisticated communication technologies, institutions of higher education are expanding and no longer limited to student markets or educational resources in their geographic regions. Likewise, the growing need for lifelong learning opportunities to keep pace with social, economic, and technological changes fuels demand accessible alternatives to traditional real-time, campus-based instruction. In addition, competition among higher education institutions contributes to technology's advance

within colleges and universities. Not wishing to be outpaced by competitors, many institutions are active participants in a technology "arms race" that requires the rapid adoption of new technological innovations as soon as they become available (Baldwin, R;Technology in Education)

- **Various available nutrition software boosting higher education are:**

1. **Diet cal**

   Dietcal is software for dietary calculations, assessment, and planning. It was developed primarily keeping in mind the Indian Dietetic Scenario. The software was developed by Dr. Gurdeep Kaur of AIIMS in New Delhi. The software is useful for calculating the nutrient value of any food item. It contains all the nutrients given in the book 'Nutritive Value of Indian Foods' by ICMR. One does not need to spend hours calculating the nutrients of a particular food item. Just a click would serve the purpose. It is meant for providing for the most commonly and frequently required dietary calculation needs.

   Features of Dietcal:

   - Based on Indian Data
   - Editable central Respiratory of nutrients and their measurable units.
   - Facilities to create custom recipes
   - Allow calculation of nutritive values of a set of food items and recipes
   - Helps calculations and keeping track of a person's nutritional status
   - Provides for analysis/publishing of the results of calculation (Dietcal.exe)

2. **Diet soft**

This software is for Dietary Calculations, developed primarily keeping in mind the Indian Dietetic Scenario. It is meant for providing for most commonly and frequently required dietary calculation needs.

   Features of diet soft:

   - Editable Central Repository of Nutrients and their Measure Units
   - Editable Central Repository of Food Items classified by Food Groups and their Nutritive Values.
   - Allows calculation of nutritive values of a set of Food Items and Recipes.
   - Helps calculation and keeping track of a person's Nutrient Intake.
   - Provides for analysis/publishing of the results of calculations (Dietsoft.in)

3. **Dietary Guidelines for Indians- Mobile app**

This app is based on the Recommended Dietary Allowances (RDAs) for Indians prescribed by the National Institute of Nutrition, India. It helps in simplifying the nutrient-centered RDAs into practicable, easy-to-follow guidelines, this app provides succinct explanation and rationale behind each of the 15 guidelines. By following the guidelines using this app one can equip for a healthy life (https://play.google.com/)

4. **Nutrify India Now**

Many chronic diseases have a direct or indirect association with Nutrition so It is important to understand and knowthe optimal requirement of nutrients for good health and wellbeing.

Aim: This app is used to provide usefuland necessary information on nutrients available in food and their daily requirements. The app also provides dataon raw foods and recipes with their nutrient composition. The app aids in assessing your nutritional status,required dietary allowance (RDA), daily food intake and energy expenditure (https://play.google.com/)

Some other nutritional Softwares used are: -

Nutri Admin: It allows users to create professional meal plans, and search over 70,000+ food items in the database. To make things even easier, the tool auto-generate a personalized plan (including recipes) in 60 seconds. You can also generate nutritional analysis.

Nutrition maker: The tool also acts as a nutritional education tool for the client as it regularly displays nutritional information that provides improved understanding of nutrition concepts (Dinita, M; 2019)

- **Advantages provided by nutrition software:**

1. Helps guide students toward education that enables them to achieve their goals, is aligned with their needs and interests**:** Students should have access to digital tools that allow them to explore their interests and that provide the resources for evaluating various education and career pathways.

2. Helps to prepare students for postsecondary-level work: Institutions should employ technology-enabled approaches to meet students where they use redesigned diagnostic tools and adaptive, targeted remediation for students who are in need of additional preparation.

3. It also allows students to adjust the timing and format of education to fit other priorities and according to their need in lives: Colleges, universities, and other education providers should consider how to offer programming at various times and through multiple means of delivery such as online, mobile, and blended, and through competency-based education models.

4. Provide students with affordable access to the high-quality resources for their success and to empower them to become curators of their own learning:Institutions should ensure that students have immediate access to affordable, up-to-date learning materials that are based on current learning research and are accessible to all students.

5. Enable advisors to help students progress and skim through changing needs and circumstances: Coaches, advisors, and mentors should robust data to provide students with guidance to succeed through times of transition. This support may include proactive advising and outreach by phone, text, and email

6. Help institutions identify and provide timely and targeted assistance to students: Instructors and advisors should have appropriate access to course-specific learning analytics data so that individualized interventions can be done to help students connect with the additional academic and social support they may need.

7. Allow students to build meaningful education pathways incrementally: Institutions and education providers should offer transferrable credits to accommodate students who need to move seamlessly in and out of their institutions, and between systems of education, to efficiently accommodate their learning and life goals.

8. Boost students to document their learning in ways that can be applied to further education or meaningful work: Institutions and education providers should leverage technology to allow students to accurately demonstrate a variety of learning outcomes and should provide transparent, portable credentials that are articulated and recognized across traditional or non-traditional systems (Office of educational technology, 2017).

Material and method

A secondary data collection method was used for the study. The material was accumulated by: -

- Information was collected through the study of the existing organizational document, forms, and records from online sources like shodhganga.

- Users/User staff of the system
- Professional staff

Results

This nutritional software has proved to be quite popular and useful, as indicated by 10,000 and above downloads for both mobile apps like nutrify India now and Indian dietary guidelines by NIN (on google play store) with ratings hovering between 3.5 to 4.6, which is considered to be quite likable.

Various colleges and universities are also widely making use of licensed nutrition software like dietcal, dietsoft, etc to impart education and ease the learning process.

Limitations of Technology

In spite of its nearly thousand uses, technology presents higher education with difficult challenges. Systematic planning of technological enhancements and upgrades to educational programs is difficult when technology changes so quickly and unpredictably, rendering no time. Academic planners are continually struggling to catch-up, to implement new technology applications that appear more quickly. Making one unable to do a careful planning process. Similarly, paying for new technologies with educational applications remains troublesome for institutions with more needs than resources(Baldwin, R;Technology in Education).

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From Chalk and Board to Videos: Use of Ict in Higher Education

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Abstract

ICT is prevalently used by teachers these days in their lectures. They can show an image, a video clip or a movie to the studentsthat helps in generating interest. In the present times, teachers have access to so many gadgets or teaching aids and ICT tools so as to make learning quick, deep, fast and interesting. Fashion design is one such programme where inputs in different aspects of the Fashion are studied and videos are used in teaching as well as learning. The present research is an inquiry related to 'Use of ICT: videos' from teachers' and students' perspectives. For this research,students and teachers from educational institutes offering bachelor's and master's programme in Fashion design in and around Chandigarh were approached and data was generated using a questionnaire. Both teachers, as well as students, supported the use of videos in higher education specifically in fashion education.

Keywords: *Technology, videos, teaching aids, learning, interesting*

Introduction

From chalk and board, the education has moved into an interactive digital media which is learner-centric. Technology is affecting higher education and there is a shift towards an integration of online learning, blended and hybrid learning and collaborative models (Johnson, Becker, Estrada, & Freeman, 2014). Globalization and rapid developments in the IT sector as well as digital media have changed the contours of teaching and the role if ICT has become more important in the present-day situation.

ICT and education

Information and Communication technology has revolutionised various sectors globally (Hilbert & Lopez, 2011) especially the education sector and this has become a critical part of the learning process for university students(Basri ,Alandejani,&Almadani, 2018).Technology can augment learning (Schmid *et al.*, 2014) and so is ICT contributing positively towards learning (Eng, 2005) : it presents a new learning environment for learners, helping in training, developing abilities, bringing up the talents(Samari&Atashak, 2011), facilitating discussions and feedbacks on academic matters from all possible sources whether teachers, seniors or colleagues (Basri ,Alandejani,&Almadani, 2018). It leads to better understanding and repairing knowledge gaps (Deaney, Ruthven, & Hennessy, 2003).The ease, speed and accuracy of performing assignments and presenting the same in an attractive manner are benefits of ICT tools. ICT adopted in education can positively impact teaching learning as well as research. It also affects the delivery as well as access to a wider range of learners. It provides a rich environment and motivation for the teaching learning process. Not only this but best course material can be shared with the help of means of ICT(Noor-Ul-Amin, 2012Manydevelopments in information and communication technologyhave brought revolution in the methods and strategies used for teaching and

learning (Balbay& Kilis, 2017) and hence so much can be gained from computerised learning/teaching packages (Wright, 1995). Combining various elements like text, videos, audios, animation, music helps the presenter to share his/her expertise/view point or talent etc. to the public/viewers in an interesting way and also permits the creation of a realistic practice field for teachers to solve problems of teaching (Ayersman, 1996). Multimedia learning environments facilitate the development of independent, self-regulated thinking (Farr, Ownbey, Branson, Huantian,& Starr, 2005). Visuals can make imagination easier and help students understand abstract ideas and conceptions, they help learners overcome their language problems, make young learners relaxed, and help them remember strategies (Oxford,2011).

Use of videos in higher education

Video has become an important part of higher education and it helps in enhancing the traditional way of teaching methodology and can be a highly effective educational tool. Blending oral lectures with videos provide an opportunity to present as well as understand the information, increases students' motivation(Bravo, Amante, Simo, Enache,& Fernandez 2011) and promotes interaction between a teacher and a learner. These can be professionally produced or teacher-produced or student-produced videos. A study conducted by Ilin,Kutlu andKutluay (2012) on theusage of the videos for grammar teaching showed the motivation of the students to take part in the lessons.

Dey (2018) highlights the enormous impact of video platforms in our everyday lives. Medaukali (2015) emphasizes the importance of the availability of the online video material which is for extra listening and note-taking practice. Youtube is one such platform that has grown exceptionally since its beginning in 2005. People are really interested to upload their contents as well as learn from Youtube. It is used in the education industry in a big way.Youtube videos are freely available that help students to learn according to their own pace (Duffy 2008) and enhance their skills (Styati 2016) and all academicians can use it to augment knowledge (Lance&Kitchin2007). Many researchers have found a positive effect of use of videos on you tube platform in teaching and learning (Fralinger& Owens , 2009; Chtouki, Harroud, Khalidi,&Bennani 2012; Lance&Kitchin2007;Hasen &Erdley 2009 ;Mayora 2009; Barbeau 2010; Flerk, Beckam, Sterns & Hussey, 2014;Balbay &Kilis, 2017). The insights into the existing literature of the use of videos in classroom teaching, motivated the researcher to work on students and teachers from a creative field like Fashion Designing.The present research was conducted in order to studythe awareness and use of videos available on You Tube by students and teachers from the Fashion Design discipline.

Methodology

For this research, educational institutes offering bachelor's and master's programme in Fashion Design in and around Chandigarh were approached. An online questionnaire was sent to the students and teachers from these institutes and a response was obtained from 100 respondents. Along with this few interviews were conducted with teachers as well as students to understand their views and perspective for using YouTube.

Results and Discussion

All respondent teachers are teaching varied subjects to Fashion Design students. Most of the teachers are taking graduates as well as post graduate classes (71.4%) and teach both theory and practical subjects. Half of the respondents are with less than five years of teaching experience and only one-seventh with more than 15 years of experience.

Referring to videos on You Tube: By teachers

All the teacher respondents found videos on YouTube easily accessible and user friendly. As compared to teachers, students were more aware of the intricacies especially the names of You Tubers or You Tube channels and their content. That could be one of the reason that teachers searched for the videos on YouTube using topic names and students searched through the name of the topic as well as YouTubers

or YouTube channels.

The maximum number of teachers strongly agree that they refer to online videos available on Youtube channels to keep themselves self-updated about the latest developments on specific topics. Teachers also agree to that they have to add to their existing knowledge, which makes them refer to YouTube, it also improves their teaching and makes their job easier. They refer to YouTube when it is a new topic, but many responded that they don't agree to refer to YouTube when it is a new topic.

Reasons for referring to you tube videos-

Graph 1: Reasons given by teachers for referring to videos on You Tube

Referring tovideos on You Tube: By students

The maximum number of students refer to YouTube to clarify doubts. Some of the students mentioned during the interview that while performing practical assignments they get stuck, hence they refer to videos on YouTube to clarify any doubt they have. 47.1% students replied that they are keen to learn alternate methods of doing an assignment e.g. there are many methods of sewing one component or making a pattern or sketching a figure or design process followed, hence students want to learn different as well as easy and quick methods which is usually achieved through YouTube. 34.5% of the respondents students' watch YouTube to keep themselves updated about latest developments in the field of Fashion or topic of their choice so they keep on surfing YouTube on one topic to gain more and more knowledge about it.

Graph 2: Distribution of students according to the reasons for referring to videos on You Tube

A maximum number of students (56.3%) said that they refer to videos on YouTube for practical subjects. Sewing and embroideries are two main subjects for which the maximum number of students refer to youtube. Many students find these subjects technical, tough and difficult, hence they see you tube videos and finish their work. Though there are books in the library that have step by step illustrations of performing a task, they feel it's easy and interesting to see videos and do work. It was found that

students referred to YouTube sometimes for theory subjects but mostly for practical subjects.

Subject	Value
Sewing	32 (36.8%)
Pattern making	19 (21.8%)
History of costumes	17 (19.5%)
Embroideries	28 (32.2%)
Traditional Textiles	17 (19.5%)
Fashion study	10 (11.5%)
Fashion illustration	18 (20.7%)
Textile Science/ Fabric Technology	17 (19.5%)
Rendering	9 (10.3%)
Sketching	11 (12.6%)
Design process	11 (12.6%)
Merchandising	5 (5.7%)
Marketing	9 (10.3%)
Fashion Journalism	8 (9.2%)
Research methodology	3 (3.4%)
Statistics	2 (2.3%)
Entrepreneurship	3 (3.4%)
Weaving	1 (1.1%)
They never use youtube	1 (1.1%)
I dont use you tube more.	1 (1.1%)
We don't use in class	1 (1.1%)
Only ppts	1 (1.1%)
No	1 (1.1%)

Graph 3: Subjects for which videos on You Tube is referred by the student respondents

Videos in class room teaching

Maximum (71.4%) of the teachers (Graph 4) as well as Maximum students (60.9%) responded that oral lectures are blended with videos in the classroom for teaching.

Do you show you tube videos while teaching in the class
14 responses

- Always
- Sometimes
- Never
- Tell them they can see the steps on you tube for more clarification

71.4% / 14.3% / 7.1% / 7.1%

Graph 4: Distribution of teacher respondents according to the usage of videos in the classroom teaching

The survey revealed that Teachers have been using videos more for Practical subjects than theory subjects. It is used for almost all subjects that a Fashion design student study -Costume designing, Garment designing, collection of Indian and International designers, Design process, Fashion Illustration, Computer graphics, CAD for pattern making, Traditional Indian textiles, Needle craft/embroidery, Sewing. For Theory subjects like History of Costumes, Fabric technology, merchandising, You Tube is used.

Regarding the way of sharing videos with students, Maximum teacher respondents (42.9%) said that they share videos in the classroom on a projector. Whereas the equal number of respondents, 28.6% each, either share links or encourage students to search and share links.

How do you share videos with students
14 responses

- Presenting in the classroom
- Share links of videos
- Ask students to search and share further with others

28.6% / 28.6% / 42.9%

Graph 5: Distribution of teacher respondents on the basis of sharing videos with the students

Reasons for showing videos in class room teaching and learning

Maximum of the teachers agreed to that while teaching using videos with the lecture makes learning fast, and students feels enthusiastic, it is beneficial in providing practical inputs, make students more attentive, increases class participation, it enhances their knowledge and lecture retention is more. There were two elements related to use of videos fromYou Tube channel in teaching where maximum teachers had neutral response like if YouTube is used then there is no need to make notes and YouTube improves students' performance. Many of them felt that YouTube is just a medium to convey the lessons/ teachings to the students. Their performance is entirely dependent on the hard work they put in completing their assignments. Along with watching video from a You Tube channel they have to make notes or pointers with their hands so that they can refer it later on as no one has time to see so many videos and remember each.

Reasons for using you tube videos in teaching

Graph 6: Opinion of teachers regarding use of videos from YouTube channel in teaching and learning

Give your opinion regarding the use of you tube videos in class room teaching and learning

Graph 7: Opinion of students regarding the use of videos from YouTube channel in teaching and learning

Maximum of the students had the opinion that when they watch videos on YouTube channel learning becomes easier and faster, it enhances students' knowledge, improves their performance and they feel enthusiastic. Students also felt that if YouTube videos are shown in the class, class participation is increased, it is beneficial in providing practical inputs, and students become more attentive. For one element there were more neutral responses: if YouTube is used in the class then there is no need to pen down notes. Few students in an interview said that even if our teacher plays videos in the class we make or pen down points so that they can be referred to while learning.

 Students also reported that learning from YouTube is easy as they can access the channel any time, they can do it at their own pace and many complex things/topics can be learnt easily. Course material that is accessible online helps students become autonomous (Balbay& Kilis 2017). Students have shown a preference towards using multimedia in their classrooms by their teachers as 71.3% of the students feel that sometimes (but not always)online education like from YouTube can replace the traditional method of teaching.

Conclusion and Implications of the Study

The present research has proved that videos from the YouTube channel have been used by students and teachers of Fashion Design discipline as useful learning as well as a teaching aid. Along with the benefits

of YouTube, there are some concerns elaborated by respondents like the quality of video clips and the content available on YouTube. For many students, it is not possible to find out the authenticity of the information provided. Though YouTube is so beneficial and can supplement the classroom teaching but cannot replace it. Teachers still have a critical role to play in spite of the usage of YouTube by students in learning (Balbay& Kilis 2017). Looking at the digital generation and wide usage of the YouTube and availability of learning material has inspired teachers or resource persons to prepare Massive Online Open Courses (MOOCs).

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Your Vision Our Future ICT's Opportunities, Challenges & Perspectives in Shaping our Higher Education

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Abstract

In this paper we shall discuss the various implications for individual learning resulting from the use of Information and Communication Technology (ICT). Higher Education has been rightly defined as the mother of all Professions. The University education shape the Psychological, Social,Behavioral & Human Values. Effective use of technology motivates us as well as helps students to understand any abstract concepts clearly.Countries across the world using ICT in facilitating information dissemination &communication in all areas of education. The present generation of students, who are called digital natives or net generation finds anything to do with the internet attractive. The present paper shows that such interests of students can be fruitfully tapped as digital generation who can make their future bright if they are guided properly but for guidance all the staff members should be aware about all the new techniques or whatever challenges they are facing related with technology should belearned &trained with professionals to get rid of this technical issues. And take benefits of every opportunity to fulfil their future needs.In this paper firstly we discuss the new approaches to in-service training needed in the present socio-economic climate defining the conditions for inventing such approaches. Then we can understand the operative and cognitive problems that employees face with regard to continuous learning, drawing on our experience with different learner populations: teachers, trainers, company personnel, and employees in public administration. On the basis of theseabove ideology, we will derive some general indications as to the training structure and educational tools that should be created in order to give inspiration to continuous learning. In particular,the role that may be played by a technology-based environment for promotions can be discussed how these general indications could create change in our perspectiveas well aschange can be seenin traditional education system due to ICT.

Keywords: *Teaching & Learning Process, Impact of ICT, Technology, Opportunity, Progress &e-Learning.*

Introduction

Information and communication technology (ICT) have become an important source of innovation for every sector across the globe. Demand for skilled and competent labour is ever increasing in the contemporary globalised society. In this backdrop, access to quality in higher education for all has

emerged as determining factor of economic growth and development. In order to increase the access to higher education and improving its reach to the remotest parts of the country contribution of open and distance learning facilities is on the increase. In the education sector, particularly, the application of ICT has become a critical part of the learning process for university students both outside and inside the classroom. The government and other stakeholders in the education sector such as university management and researchers have invested millions of amounts to adopt ICT in the education system during the last two decades. Most universities that have fully adopted ICT have recorded immense advancement in the application of ICT for the improvement of learning methods, teaching, research, and development.Increasingcompetitiveness, technological change and the re-engineering ofproduction and social processes require continuous upgrading of skills and personal growth.ICT can be an enabler, a facilitator and a superb enrichment tool.

Opportunity

World of work is becoming high tech accordingly we have to change our way of working.Rather than working harder we have to work smarter in which ICT tools are the treasure for us.A similar situation is being faced by training organisations. Increased competitiveness and the resulting need to improve and diversify the training they offer means that trainers must have theoretical and practical know-how in new techniques for delivering training. This in turn calls for the application of new methods for presenting contents and organising learning activities.Main opportunity of ICT in higher education is: Improves engagement, Improves Knowledge retention, Encourage collaboration & benefits for teachers are as follows: Virtual Lesson Plans, Grading Softwares, Online Assessment & different apps can be used to enhance the quality of teaching & can keep students more engaged. Teacher can save a lot of valuable time which can be used for working with students who are struggling.

In a corporate environment, technology plays a dominating role. The entire culture, all elements of work interact with ICT; a professional office does not feature lines of desks using only paper and pencils, with a separate 'suite' of computers, and an area for the use of digital cameras. Rather, such technology is integrated within the whole. In the world of constantly changing technology, it is vital that young people are equipped to be confident and safe users of ICT. If we discuss about Benefits of Technologies, we have no. of examples which we are experiencing in our everyday life. We our surrounded from Head to Toe wearable technologies such as: Google Glasses for google maps, Smart Watches: Computerised with functionality that is enhanced beyond time keeping, Basic Task: Calculations, Translations & all mobile Appsetc. Its just like we are having wearable computers which we can use anywhere any time.

Challenges in the way of higher education:

The integration of ICT use in higher education is the main way in facing globalization and it would respond to the type 21stcentury society that we living in. ICT integration in education is a broad process of applying technology to the curriculum to improve teaching and learning process.There are a lot of challenges that come in the way of universities. Be it infrastructural or the rigidness to adapt to the change by those involved in the community.

Environmental Challenges: There is a limited regional infrastructure for the full ICTs integration in education. It is very important for policymakers and planners before any ICT implementation in education to carefully consider the following and make sure they are sorted with all of the environmental challenges as mentioned below.

a) Appropriate rooms or buildings available to house the technology. In countries where they are many old buildings, ensure proper electrically wiring, heating/cooling and ventilation and also security and safety will be needed.

b) Availability of electricity and telephony in most developing countries where large areas without a reliable supply of electricity and the nearest telephones are miles away still exist.

c) Policymakers should also look at the ubiquity of different types of ICT in the country in general and in the educational system in particular.

d) Connectivity to Internet is one most important aspect. Seamless Internet connection via Wi-Fi is necessary as it gives a lot of opportunities to the students.

Educational Challenges: In term of human resources, the constraints are due to the lack of trained teaching manpower and lack of motivation among educators to adopt and integrate ICT as a tool into their teaching or educational curriculum. Extra effort and time involve in the use of ICTs in education. In some part of the world due to educational background generally there is lack preparedness for students entering higher education in the knowledge and skills required for the basic use of technologies.

Resistance to change: Resistance to technology comes in many forms, but one of the key resistance challenges identified is "comfort with the status quo." According to the researchers, teachers and students leaders often see technological experimentation as outside the scope of their job descriptions.

Professional development: Key among all challenges is the lack of adequate, ongoing professional development for teachers who are required to integrate new technologies into their classrooms yet who are unprepared or unable to understand new technologies.

ICT's Perspective in Shaping Higher Education

ICT has the potential to enhance and transform higher education in many ways.

1) Govt. Taking Initiative Through ICT In Making Digital India: Government of India has provided us various softwares for helping us to be aware about all the updates for national schemes in the favour of all the citizens for example:

   NME-ICT, National ICT Policy, NKN, e-Adhyayan, SWAYAM, N-e-Library, e-Basta& national ICT Curriculum. ICT has enhanced distance learning due to ICT teaching community is able to reach remote areas & learners are able to access qualitative learning environment from anywhere. "Throughout the studies' planning procedures, ICT opportunities are constantly being identified. ICT skills such as musical composition, artistic creation in 2D and 3D, programming and constructing prototypes, and concept mapping and all the while integrating core usage throughout the whole curriculum. The students are taught to be intuitive users of technology; rather than learning the intricacies of one particular operating system, software style, user interface or piece of hardware, they are given the skills to 'find their way around' a wide variety of systems. Learning how to learn is a real priority.

2) Helping in Expanding Access To Education: ICTs are potentially powerful tool for extending educational opportunities, both formal and non-formal, to previously underserved constituencies — scattered and rural populations, groups traditionally excluded from education due to cultural or social reasons such as ethnic minorities, girls and women, persons with disabilities, and the elderly, as well as all others who for reasons of cost or because of time constraints are unable to enroll on campus.

3) Anytime, Anywhere: One defining feature of ICTs is their ability to transcend time and space. ICTs make possible learning. Online course materials, for example, may be accessed 24 hours a day, 7 days a week. ICT-based educational delivery (e.g., educational programming broadcast over radio or television) also guides all learners and the instructor to be in one physical location. Additionally, certain types of ICTs, such as teleconferencing technologies, enable instruction to be received simultaneously by multiple, geographically dispersed learners.

4) Access to Remote Learning Resources: Teachers and learners no longer have to depend entirely on printed books and other materials in physical media housed in libraries for their educational needs. With the Internet and the World Wide Web, a wealth of learning materials in almost every subject and in a variety of media can now be accessed from anywhere at anytime. ICTs also facilitate access to resource persons- mentors, experts, researchers, professionals, business leaders, and peers-all over the world.In line with this increasing interest in technology for Higher education, there has been a rush of education-focused tablet computers in the market. The most high-profile of these has been Aakash, which was launched by Kapil Sibal, union minister for human resource development, in October 2011. The Aakash project is part of the ministry's National Mission on Education through Information & Communication Technology (NME-ICT). It aims to eliminate digital illiteracy by distributing the Aakash tablets to students across India at subsidized rates. But even as universities in India are going through this transformation powered by technology, one key question is how big a role technology will play in the education sector.According to Mr. S. Sadagopan, founder-director at the International Institute of Information Technology in Bangalore, pointed out that there are four parts to learning -lectures, library, laboratory and life- noting that, "Technology plays a vital role in all these.

Conclusion

In this paper it is almost explained in details about the role, benefits & perspective of ICT in shaping higher education.The timing has never been better for using technology to enable and improve learning all levels, in all places, and for people of all background. We need to highlight & promote ICT in every school, university so that we can enhance the technology-enabled education for the overall development of the country. Without the use of technology, we will never be able to become awelldeveloped country, because we are having world's largest youth population. Whom we need to teach & make them proficient at their work place for shaping their future.

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Impact of Education on Quality of Life of Type 2 Diabetics taking Medication through Injection

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Abstract

Background: Diabetes mellitus not only affects the blood glucose levels in the body but also the quality of life, impacting the daily routine. The objective of the study was to assess the effect of higher education on the quality of life of Type 2 Diabetics taking medication through injections.

Method: Random purposive sample of 99 (52 males and 47 females) type 2 diabetics taking medication through injections were assessed. The sample was prospectively taken from the OPD of Endocrinology of Post Graduate Institute of Medical Research, sector 12, Chandigarh, India. A self-designed questionnaire was used to collect demographic information. Validated tool- Treatment-Related Impact Measure- Diabetes (TRIM-D) was used to assess treatment burden and daily life parameters among respondents Statistical analysis of data was done using SPSS software version 20.0.

Results: It was observed that females felt less burden of the treatment of diabetes (26.40 ±5.13) than males (25.46 ±5.34) when they took medication through injections. In the daily life parameter, interference of medication in the daily life routine was felt more by females (11.42 ±3.63) as compared to males (10.71 ±4.40). Higher levels of treatment burden were felt among samples who were graduates (24.81 ±6.16) and above graduates (25.66 ±5.12). Further, respondents who were graduates (10.21 ±4.09) and above graduates (9.60 ±3.13)felt lesser interference of medication in their daily lives.

Conclusion: It can be concluded that education has an impact on the quality of life of diabetics. Treatment burden was felt more among those who were educated as they may have more knowledge about it. At the same time, the daily life routine was managed well by educated diabetics as knowledge aided them to supervise their life in an appropriate way. A unified approach of education, nutrition, medication, counseling, care is pertinent for a healthy and positive quality of life.

Key words: Type 2 diabetes mellitus, Education, Medication, Injections, Quality of life.

Introduction

Diabetes mellitus includes medication to control blood glucose levels which affects the functioning and well being, thus impacting the quality of life (Mohan et. al., 2007). It is a long term degenerative disease wherein the pancreas do not secrete an adequate amount of insulin or there is a decrease of insulin sensitivity in the body (Atlas, 2015). The treatment can be varied in terms of administration which maybe oral, syringe, pen, pump as well as the type of antidiabetic agents, e.g. oral hypoglycemic agents or insulin (Wexler et. al, 2006).According to the American Diabetes Association along with the consultation

of W.H.O. (2013), the term Diabetes Mellitus has been described as a metabolic disorder of multiple etiology. The effects of diabetes mellitus include long-term damage, dysfunction and failure of various organs. In the year 2015, a number of diabetes has risen from 108 million in 1980 to 415 million. The global prevalence of diabetes among adults over 18 years of age has risen from 4.7% in 1980 to 8.5% in 2014. (Global Report on Diabetes, 2016)It has been seen that of the weighted prevalence of diabetes (both known and newly diagnosed) is 13.6% in Chandigarh (Anjanan et al., 2011). It is estimated that by 2030, the number of people with diabetes above 64 years of age will be greater than 82 million in developing countries and greater than 48 million in developed countries (King, Aubert, & Herman, 1998).

The United Kingdom Prospective Diabetes Study (1999) conducted a study wherein, patients with Type 2 Diabetes facing the possibility of insulin being added to their treatment were concerned and worried about its effect on Quality of Life. They were worried and concerned about the pains of injections and proper technique.

Papadopoulos et. al. (2007) conducted a study to assess the predictors affecting the quality of life of type 2 diabetics. Health-related quality of life of 229 respondents from the rural area of Lesvos, Greece was analyzed. It was seen that the quality of life of respondents with lower education, single marital status, diabetic complications, obesity, hypertension was impaired. Thus, higher education, promotion of health, physical activity and a positive attitude may safeguard health. Educational programs may act as a stepping stone to reduce the burden felt on health due to diabetes.

Keeping in view the quality of life, education, and mode of medication in mind, the current study has been conducted to assess the effect of higher education on the quality of life of Type 2 Diabetics taking medication injectably.

Methodology

The study was conducted on consecutive type 2 diabetic patients, visiting the O.P.D., Endocrinology Department, of Post Graduate Institute of Medical Research, Sector 12, Chandigarh, India.

A purposive sample of 99 types 2 diabetic respondents taking medication through injections of which 52 were males and 47 were female patients.

A self-designed questionnaire to note down the demographic information of every respondent was used. The name, age, sex, address and educational qualifications were carefully penned down.

Validated questionnaire- Treatment-Related Impact Measure- Diabetes (TRIM-D) was also used to assess the treatment burden and daily life parameters among respondents. The questions were oriented towards diabetes, measured on a five-point likert scale. The treatment burden items (six items) ranged from extremely satisfied, very satisfied, somewhat satisfied, a little satisfied to not at all satisfied. The daily life items (five items) ranged from always, often, sometimes, rare to never. The questions asked to the respondents were asked in different ways and in the language, they were comfortable in to reduce bias.

The questions asked as per the questionnaire to the respondents were:

Figure 1

Items in Treatment Burden and Daily Life parameters.

Statistical analysis of data was done using SPSS software version 20.0.

Results and Discussions

Distribution on the basis of the quality of life

Table 1

Distribution on the basis of the quality of life

Quality of Life Parameters	Medication	N	Mean ± Standard Deviation
Treatment burden (30 points questions)	Injection	99	25.90 ±5.23
Daily life (25 points questions)	Injection	99	11.05 ±4.05

Treatment Burden

30 points questions (Six items). In the above table, the score was analyzed as higher the mean, lower was the treatment burden. It was observed that the respondents were very satisfied with the treatment.

Daily Life

25 points questions (five items). In the table, the higher the mean, more was the interference of medication in daily life.It was observed that the interference ranged from rare to sometimes among the respondents.

Distribution on the basis of gender and quality of life

Table 2

Distribution on the basis of gender and quality of life

	Gender	Mean ± SD
Treatment burden (30 points questions)	Males	25.46 ±5.34
	Females	26.40 ±5.13
Daily life (25 points questions)	Males	10.71 ±4.40
	Females	11.42 ±3.63

Figure 2 *Distribution on the basis of gender and quality of life*

In the above table, it was seen that in the treatment burden category, the females were felt less burden of the treatment of diabetes than males when they took medication through injections. In the daily life parameter, the interference of the medication in the daily life routine was felt more by the females as compared to males. The female respondents felt less burden of storing and preparing medication, the convenience of medication, etc., but at the same time their social activities, accomplishments, mealtime planning got limited due to the medication,

Distribution of the samples on the basis of educational qualifications

Table 3 Distribution of the samples on the basis of educational qualifications

		MEDICATION- INJECTION	
		Percent	(N=99)
EDUCATION	Illiterate	11.1%	
	Primary	6.1%	
	Middle &Matric	26.3%	
	Diploma and +2	9.1%	
	Graduate	32.3%	
	Higher than Graduate	15.2%	
TOTAL		100%	

Table 3 differentiates the diabetic respondents taking medication through injections on the basis of their educational qualifications into five categories. It was observed that 47.5% of respondents had received higher education, 52.5% of diabetics were undergraduates. The table above shows that 32.3% were graduates followed by 26.3% of respondents who had studied only till middle and matric class. Only 6.1% of the respondents were educated till the primary level.

Distribution on the basis of education and quality of life

Table 4 Distribution on the basis of education and quality of life

QUALITY OF LIFE PARAMETER	Education	Mean ± SD
TREATMENT BURDEN	Illiterate	26.54 ±4.63
	Primary	29.00 ±.63
	Middle&Matric	26.15 ±5.01
	diploma and +2	26.66 ±4.87
	Graduate	24.81 ±6.16
	Higher than Graduate	25.66 ±5.12
	Total	25.90 ±5.23
DAILY LIFE	Illiterate	11.81 ±5.61
	Primary	12.16 ±3.81
	Middle&Matric	11.57 ±3.96
	diploma and +2	13.22 ±2.63
	Graduate	10.21 ±4.09
	Higher than Graduate	9.60 ±3.13
	Total	11.05 ±4.05

It was evident from the above table that higher levels of treatment burden due to medication was felt among samples who were graduates and above graduates. Further, respondents who were graduates and above graduates felt lesser interference of medication in their daily lives as compared to those who

were not so well educated by taking medication through injections. Educational levels have an impact on the quality of life of diabetics. The respondents who were educated knew more about the diabetics and thus felt it's a burden in terms of medication, but at the same time, they have adapted to the measures so that their respective daily life does not suffer.

Summary

Diabetes is a debilitating metabolic disease that requires lifelong management. Adequate knowledge can supplement its care. It is essential for all to receive education to understand and be aware of different ailments and for better health management and wellbeing. Daily life among diabetics was observed to be managed well among those who were educated. A positive bent of mind, as diabetes is a lifelong ailment and education can change the perspective of living life. Adequate education will tilt the bent of mind towards self-care rather than being disappointed.

Thus, a unified approach of education, nutrition, medication, counseling, care is pertinent for a healthy and positive quality of life.

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Issues, Challenges and Concerns in Higher Education in Terms of Nutritional and Psychosocial Aspects in Pregnant Wives of Military Personnel

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Abstract

The present study entitled 'Issues, challenges and concerns in higher education in terms of nutritional and psychosocial aspects in pregnant wives of military personnel' is an attempt to study the social support, self-esteem, depression and various issues faced by the military pregnant wifes because of the challenges that evoke these issues like deployments, frequent moves, family separation (especially spouses) and dietary pattern. Studies revealed that maximum number of pregnant women dietary intake is very much affected by their psychosocial parameters and education. If any pregnant woman is living with her husband or with her joint family or nuclear family then she is able to cope with her health, nutritional status and the psychosocial aspects in a positive manner. These issues are preventable if their companions are with them during their very crucial phase of life or social support is provided.

Keywords: *Pregnant, psychosocial status, education, diet, nutrition, social support, self-esteem.*

Introduction

Military life is challenging for soldiers and their families. To the typical day-to-day challenges that all people face, this population experiences unique stress related to military life, such as the frequent moves and military deployments generated according to the military needs (Sims et al., 2017). The relationships of the pregnant woman with each family member are unique and have its own intimacy, exclusiveness and bonds. Military lifestyle plays an important role in affecting women's nutritional status and psychological behavior.

Pregnancy is a vital, anabolic, character of special qualities whose purpose is to allow growth and development of the foetus while maintaining maternal homeostasis and preparing a female for breast feeding. The issues in adjustments or changes in the mother body relate to changes in maternal behavior (psychosocial) and affects the metabolism of all nutrients. The growing foetus depends primarily on the nutritional status of the mother before conception and explains its ability to adapt to various nutritional and psychosocial situations (Taleb *et al.*, 2011).

Pregnancy has been identified as a period of identity reformation, a period of reordering interpersonal relationships and interpersonal space, and a period of personality maturation (Rubin, 1975). The

pregnancy is the three stage process named as trimesters. In the first trimester (1-13 weeks) there are many chances of miscarriage during 2ⁿᵈ trimester (14-27 weeks), the improvement of foetus can be extra effortlessly diagnosed and monitored and the last trimester (28-40 weeks) shows full growth of the foetus. During pregnancy new experiences occur as biological, cognitive and social changes take place. This stage is charged with emotional and physical changes between the learned morality of the mother and the developed ethics of motherhood. The period of pregnancy is a beautiful journey of a female between a wife and a mother. The females may perceive a significant psychosocial challenge as they attempt to adapt to the pregnancy and forthcoming parenthood. In such a conditions in which they need to deal with all the changes occurring in them physically and mentally alone or with or without their spouses because there are many conditions where military males are deployed away from them which cause the feeling of low self esteem, lack of happiness, social support and loneliness. Positive self esteem and social support for the pregnant females have been identified as providing a sense of superiority or control, as they reduce feelings of helplessness and promote maternal-fetal attachment. (Smith, 1995).

Self esteem is defined as the degree to which one values oneself (Rosenberg, 1965; 1979). Self-esteem include age, individual attributes, life events, perceptions of specific situation and perception of others appraisal and feedback. Pregnancy can affect the woman's self esteem in either a positive or a negative manner (Kemp and Pond, 1992). The studies revealed that Maternal-Foetal Attachment was significantly related to self esteem and to the total number of people indicated as being supportive (Smith, 1995). If women are educated than they are very well aware about themselves and have a positive self esteem which help them in pregnancy.

Social support is a concern which has been identified as support which provides "information, nurturance, empathy, encouragement, validating behavior, constructive genuineness" (Brown, 1986). Social support helps the pregnant females in particular acceptance of the unborn baby by self and others. As social support increases, low self esteem and anxiety decrease (Rosenberg, 1965). Higgins *et al.*, (1994) found that "women with low self esteem have difficulty in seeking social support".

Postpartum depression is an emotional disorder issue which occurs in the females during their starting phase of pregnancy and can remain up to 2 years. It is characterized by feelings of sadness, tearfulness, self reproach or guilt, irritability, fatigue, depressed appetite, sleep disturbances. According to the military needs deployments occur in which military personnel's are transferred in various regions that may fall in the category of peace or field and because of this females experience challenges and have a feeling of unhappiness and loneliness due to the military stresses which is different from the civilian life challenges and stress.

Feeling of happiness can cause a unique bond between the maternal and fetus and often spread feeling of acceptance and love around everyone in the family.

Pregnancy is one of the critical periods when nutrition plays a very crucial role. Under nutrition in females is a concern that may occur in the pregnancy and can show adverse effects on future baby birth weight. However, low pre-pregnancy BMI in females is also a risk factor for pre term delivery. Lack of nutritional education in pregnant females can cause many problems like anemia, osteomalacia, still birth, premature birth and mental retardation risks increasing in infants due to insufficient and unbalanced nutrition. It was seen that as a result of nutrition education provided by a dietitian, saturated fat intake was decreased, and protein and calcium intake and vegetable consumption were increased during the pregnancy period (Guelinckx et al., 2009). In a study conducted on Syrian refugee women to identify their pregnancy related nutrition revealed that 56% of studied population had no knowledge about maternal nutrition during pregnancy. Knowledge, attitude and practices towards nutrition and diet during pregnancy were still lacking among this sensitive population (Harb *et al.*, 2018).

Dietary intake is the most important concern during pregnancy because it has the ability to influence birth outcome and cognitive development. Dietary pattern of an individual depends upon the health status like psychosocial conditions, height, weight and which state they belong, lifestyle, food selection and food habits (vegetarian, non-vegetarian or ova-vegetarian). Dietary habits are also dependent upon the availability of food for consumption.

Table 1.1 Recommended dietary allowances for women

Sample variation	Energy (kcal)	Protein (gm)	Fat (gm)	Iron (mg)	Calcium (mg)
Sedentary	1900	55	20	21	600
Pregnant	2250	78	30	35	1200
Lactating (0-6 months)	2500	74	30	35	1200
Lactation (6-12 months)	2420	68	30	21	1200

Table 1.2 RDA for women (ICMR, 2010)

Conclusion

Social support of the spouse to the pregnant female helps her to have high self esteem, self-believe in order to accept herself to the changing environment. There are various challenges faced by the pregnant women in the military lifestyle because of transfer according to the need of military and separation from their families. Positive self esteem and social support provide a "sense of mastery and reduces feeling of helplessness" influencing prenatal and postnatal satisfaction which encourage happiness. It will be a sign of relief if pregnant females are educated about all the issues and challenges they are going to face in the military life and prepare themselves according to those situations.

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Empowering women through Higher Education in Marital Structure

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Abstract

Empowerment is defined as giving power, to creating power within and enabling. It can be regarded as a process of awareness and capacity building that leads to greater participation, better decision making power and transformative action. Education is a milestone for women empowerment as it is used as an agent of basic change in the status of women. Where traditionally, women had a little say in the family decision making, with access to higher education, women have begun to express their newly found self-belief in having a say in both within the family and outside as well. Women empowerment enables autonomy and control over their lives. The empowered women become agents of their own development, are able to exercise choices to set their own agenda and be strong enough to challenge and change their subordinate position in society. The aim of the study was to determine the association between the working status of women due to access to higher education and decision-making power in the marital structure. The study was conducted taking 100 women of Chandigarh city. It was found that the women having access to higher education and were working had more decision making power in the marital structure than their lesser-educated counterparts who were non-working.

Keywords: *Empowerment, Higher education, Working women, Decision making*

Introduction

The status of women is a barometer of democrats of any state, an indicator of human rights are respected in it. To awaken the people, it is woman who must be awakened once she is on the move, the family moves, the village moves and the nation moves- PT. JAWAHARLAL NEHRU

The term empowerment of women has become popular after the 1980s. It refers to the process of strengthening the hands of women who have been suffering from various disabilities, inequalities and gender discrimination. It is the process of providing power to women to become free from the control of others, that is, to assume the power to control her own life and to determine their own conditions. It could also be understood as the process of providing equal rights, opportunities, responsibilities, and power positions to women so that they are able to play a role at par with men with society. Higher education plays a very important role in empowering women. Over the past decade, not only have we witnessed a change in trends in the workforce due to an increase in the educational status of women, women have stepped upfront from their traditional role of homemakers to running multinational companies. Education provides a platform for women to think rationally, become skillful and hence make better decisions. Decision making power pertains to not only at the workplace but in the marital structure as well.

India has a dense population of 1.37 billion, 48.4 % being women. In a country like India, this becomes doubly essential. India traditionally has been a country that worships its women only in temples, but its women are completely marginalized in all other sectors (Bhatt and Ela, 1984). The growth rate of higher education in women is bringing a change in the way they lead their lives. Women represent themselves as an important human resource of India contributing to the socio-economic development of the nation. According to the UN, to capitalize on India's remarkable demographic dividend, the country must not just improve the quality of its education but also create employment opportunities, while ensuring increased participation of women in the workforce. Young people must be motivated and allowed to participate in decision making, especially in areas that have a direct impact on their future. Aligned with the Sustainable Development Goals, the government of India s vision to empower young people is articulated in the National Youth Policy 2014.

In India, the process of industrialization, modernization, and widespread education have brought socio –psycho changes in the attitudes and mindset of the people of the country, especially the urban. The women workforce constitutes an integral part of the total workforce in India. As a result, women who are educated are not just satisfied with their role of a mere housewife. They have realized the importance of their existence and want to utilize their intellectual abilities to do something which gives them satisfaction and at the same time secure their identity in the family and society. Hence, Indian society witnessed a large chunk of educated women joining the workforce.

Women are closing the higher education gap. Among the graduates in 2018-2019, women represented 53% undergraduate degrees, 69.6% Philosophy degrees and 41.8% Ph.Ds. However, India's low labour force participation rate of women is due in part to an increase in women continuing their education.

Empowerment of women refers to giving decision making power to women in the social, economic and political sphere of life. It is a process of making women aware of socio- psycho-cultural and political injustice that is prevailing in the society against women. The process of empowerment should start from our own home. Women 's position in the household determines women's autonomy in the family. It is worth to examine whether education plays a role in empowering women to make decisions in the family.

Objective of the study

To study the impact of education on the decision-making ability of working and non-working women.

Hypothesis of the study

There is no significant difference in decision-making ability between educated working and non-working women.

Design of the study

The present study had been planned to elaborate methodological procedures adopted and various analytical techniques employed in achieving the set objectives of the present study on "Impact of Education on Decision Making Ability of Women". A descriptive survey method of research was employed in the study.

Sample

 A sample of 100 working and non- working women in the city of Chandigarh was taken. Keeping inview the objective, hypothesis, and number of sample of the present study, the investigator found a random sampling technique suitable for data collection.

Methodology

The selection was purposive and in order to find out the differences between working and non-working women in decision making in their family, 't-test' was applied. Mean, standard deviation and 't' values were calculated.

Data Analysis and Discussion

In the present study, the raw scores of women on decision-making ability in terms of mean, standard deviation and t-test have been employed and the data was analysed.

Table 1

Difference in decision making between working and non working women

Variable	mean	S.D	t- value
Working women	9.0200	3.41957	2.937*
Non working women	7.2000	2.74048	

*Significant at .05 level

Highly significant differences exist between the mean scores of decision making of working women (9.020) and non-working women (7.200). This difference is statistically significant with the t- value 2.937 (p<.05) which indicates that working women having a higher decision-making status as compared to non-working women in their families. The first plausible reason for more decision making in the family amongst working women as compared to non-working ones may be associated with the fact that working women were better educated as compared to the non- working women and hence have the capacity to negotiate, express views and have a say in the decision-making matters of the family. Secondly, as working women become economically independent and contribute economically in the family, this generates in them a feeling of self-satisfaction and their decision-making participation increases. Thirdly, employment offers women an opportunity to interact with a large number of people and have a larger social network as compared to non-working women. This enables them to understand the complexities of the nature of human relationships in a better way which equips them to make decisions on their personal front too.

The present results are in agreement with studies by Roth (20021) and Neeru Mahajan(1976) that state that in dual-earner couples, decisions are jointly made than in couples where wives are less educated or do not work.

From a resource theory perspective, adolescents expected that well educated and employed mothers would have a higher degree of conjugal and parental power in the family as compared to the less educated and unemployed mothers (Bowerman & Elder 1964).

It was also seen in the study that working women were more qualified than their counterparts. All working women were atleast postgraduates as compared to non-working women (64%) who were graduates.

Findings and conclusion of the Study

The major findings of the study were:

The decision-making power of educated working women is more than educated non-working women. It shows that the decision making ability of women is largely affected by education. It plays a major role in women as education makes women to take a decision in an effective way. It can be concluded that a person can be shaped in thinking, behaviour and interaction in the line with the expectation of the society through undergoing the process of education.

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Students Progression through Positive Psychology

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Abstract

Positive Psychology as a theory focuses on strengths rather than weaknesses. It initiated a positive education movement to enhance an individual's character strengths and one's work ethic and brings forth an enriching learning process. The movement gave rise to awareness and formulations of positive psychology interventions (PPI), workshops and programs for well being and overall development of a person. The present review provides an understanding of students within an educational framework and improvement in forming important relationships after undergoing positive psychology interventions and positive education. It also provides an insight into the grave instances of violence and conflicts and how students have to be taught to make judgments for the same. Therefore, the focus of positive education is towards a person's cognitive, moral and emotional development. Detailed understanding of leadership along with the teaching-learning process is understood wherein satisfaction and level of engagements have escalated with the interventions provided to the students and the faculty. Hence, the positive psychology interventions and positive education are not just for the enhancement of a student but rather the whole educational framework in itself.

Keywords: *Positive Psychology, Education, Interventions, Well Being*

Introduction

The founders of Positive Psychology were Seligman and Csikszentmihalyiand they forwarded the positive education movement that was positive institutions that aim at making individuals better citizens, responsible, nurturing, altruistic, civil, tolerant and having work ethics (White, 2016). Therefore, the culture of an educational institution brings forth a positive attitude towards learning.

Positive Psychology has slowly started treading the path towards forming an identity in the realm of education (Kristjansson, 2012). Despite the contrary belief of Psychology being heavily present in West, presently there has been an inclining trend of Positive Psychology towards globalization and in recent times, there is an influx and abundance of empirical studies on Positive Psychology interventions i.e. PPI(Hendriks et al., 2019).The interventions are guided by the positive psychology theories and research and focus on accelerating positive feelings, behaviours and cognitions, which affect the well-being of an individual (Schueller, Kashdan, & Parks, 2014). Therefore, the concept can be applied to the overall development of a person.

Presently, grave instances such as violence and interpersonal conflicts have provided ground for people to contemplate the primary goals of general education. Seligman (2004) in a chapter on teaching students

to make wise judgments, a program for teaching wisdom was suggested as an educational approach wherein there is a consolidation of moral and cognitive objectives that results in critical thinking and character development. To achieve this integration, there is a requirement of equal attention and this led to understanding the Balance Theory of Wisdom (Sternberg, 2001) which was about applying the implicit and explicit knowledge for accomplishing a common good through balancing intra, inter and extra personal interest for short or long term and adapting, shaping and selecting environments. This assists individuals in reflective thinking, strategic and goal-oriented decision-making. Also, there is a certain awareness of one's values and the person is able to self-manage their way through dual interests by gaining insight and forming smart strategies. The program also worked around imbibing dialectical thinking to form wisdom. On the front of the teachers, the classroom atmosphere revolves around their practice and cooperation. Hence, there was the use of pedagogical guidelines and a curriculum was designed on the basis of the theory. The author had used a quasi-experimental design and compared wisdom and critical thinking conditions and the expectation was of students being taught wisdom indicating an increase in wisdom-related skills in comparison to students being taught only critical thinking and knowledge. Therefore, itindicates an important point of moving beyond the rigid groundrules.

Recently, there have been studies pertaining to branching out of positive psychology in positive education. In a review by Kristjansson (2012) educational interventions on the existing positive psychology concepts were highlighted. Positive personal traits such as moral virtue, resilience and positive emotions such as flow were understood in the form of classroom experiences and were found to be the personal resources of students. Through the review, it was noted that happiness is the fundamental aim of education and positive education's goal is to propose direct methods wherein the skill of happiness can be taught. Also, positive psychology puts forth the point to educational psychology that there is a need to highlight student's strengths rather than weaknesses.

Positive psychology has an abundance of applications. Macfarlane, Mackey & Carson (2017) had initiated a workshop for trainee assistant practitioners in higher education. Their article discussed learning transferable positive psychology interventions for escalating at work and in higher education and imbibing the essentiality of sustaining one well being in situations of adjusting to changing environment. A one day pilot workshop was done at a summer school for learners who were starting with their second year and the results showcased students using their strengths more, experiencing less stress, feeling healthier, energized, confident, satisfied, a higher level of engagement and meaning and experiencing faster growth and development.

In situations of increase in violence among youth in schools and higher education, Huda et al. (2018) put forth the concepts of bullying, cyberbullying and victimization. The authors aimed to study the issue of violence and formulated a model to provide a knowledge set of concepts of positive psychology such as compassionate based empathy. The results indicated that that series of mindfulness of self and social empathy if developed led to an increase in one's awareness and ability to communicate and care among higher education. Therefore the present framework may not work for caring for terminal patients but nurturing compassionate based empathy may prove to be a fruitful source in assisting knowledge on instructional design and assessment via efforts to enhance one's social and self-empathy awareness with compassion in higher education.

In the run of achieving excellence in knowledge and skills institutions may at times ignore enhancement of wellbeing. Lambart, Passmore, and Joshanloo (2018) initiated a 14-week positive psychology intervention (PPI) program also called Happiness 101 for university students from 39 nations studying in the United Arab Emirates. The students were given an opportunity to attend 18 PPIs and pre, post and 3-month post measures were done wherein hedonic, eudemonic well-being and beliefs on fear and fragility of happiness were measured. Results indicated that while comparing the experimental and

control group, the former showed high levels of hedonic and eudemonicwell-being and lower levels of fear of happiness and belief of fragile happiness. The 3 months post-intervention showed results of a boost in life satisfaction, net positive effect, reduction of belief in fear and fragility of happiness.

The impact of positive psychology on higher education has been studied by Williams, Horrell, Edmiston, and Brady (2018). They put forth the point of view that the success of higher education is based on strength-based education. The authors discussed a need for bringing a transformative experience for students and not just studying for getting a degree so that they are ready for success on the occupational grounds. The principles of positive psychology, if applied to higher education, would anticipate an escalation of students working to their potential, being aware of their strengths, have higher engagement levels socially and emotionally and form enduring relationships among administration, faculty, and peers. Thus, this would assist the student to comprehend strengths imbibed and would be innovative and competitive.

On the front of positive leadership in higher education in collaboration with positive education and for the outcomes of concepts of positive psychology, Benito et al. (2019) studied the professors of higher education in Spain using positive leadership principles to the teaching-learning process. It was noted that both students and faculty participated and enjoyed the initiative. It was seen that there was a positive impact regarding engagement and learning effectiveness. The qualitative segment of the research indicated a need for a humanized teaching and learning process. The quantitative and qualitative results indicated high engagement levels of students and faculty and students' satisfaction of the faculty.

Conclusion

Applied positive psychology has flourished abundantly in the educational field be it school or higher education wherein the educational institutions have made it a common practice to use principles of positive psychology and interventions to initiate the learning process (Lopez, 2009). It provides a close yet professional rapport with students in a relaxed environment wherein the meaning of work and learning process is enhanced and the faculty experiences an increased passion for teaching (Benito, 2019). Positive psychology in practice has led to an increase in the formulation of interventions, programs, and workshops that have enhanced the educational systems. Therefore, it is an innovative way of empowering students' learning process and inspiring students to be aware of self and society, be empathetic, collaborative and provide conflict literacy in the influx of multicultural education (Huda, 2018).

Future Directions

Despite the growth of such programs for enhancing academic institutions, it is still not widely prevalent in global norms. For the same, it important for educational institutions to take these programs seriously and utilise them. For education to flourish, Government policies should take initiatives for acquiring such skills.

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Women Empowerment through Higher Education

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Abstract

"The higher education is that which does not merely give us information but makes life in harmony with all existence" (Ravindranath Tagore). India holds the second position in the world of having the highest population. There are approximately 49% female in a total population of it. But if we analyze the current status of Indian women with other countries of the world than we can realise that the scene is not even satisfactory but the worst. Indian women generally faced all types of barriers to success like illiteracy, domestic violence, lack of motivation and support and many more. India is a country where man dominance in society prevails. Education is considered as a milestone for women empowerment. Education is the only key to unlock the golden door of freedom for development. Education plays a major role in supporting women's rights, dignity, and security. Women's Education in India has been a major preoccupation with both the government and society because educated women play a vital role in the development of the country. Education of women is the most powerful tool which helps to change the status of women in society. It is very essential for the harmonious development of the country that women should go hand by hand and shoulder to shoulder with men. And for empowering women, higher education will play a vital role. Presently the target of Higher Education is to provide women's access to vocational, technical and professional education

Keywords: *Empowerment, Higher Education*

Introduction

The aim of higher education is to generate knowledge, encouraging critical thinking and imparting skills relevant to the society determined by its needs. The barrier to education for women in India was the persistent belief that women should not design to talk paid employment although voluntary work was acceptable. Supplement family incomes and today women are well represented in many occupations. However, access to higher education is often restricted for girls who live in rural areas or in towns without colleges or universities. Indian women have undergone various problems like illiteracy, lack of support, gender bias, etc. in spite of many provisions in the constitutions of India such as mentioned equality for women in its Preamble, fundamental rights and like. There has been a dearth of women participation in public life even after the successful launch of Liberalisation, Globalisation and Privatisation concept. For empowering women, higher education will play a vital role.

Women Empowerment The Oxford American Dictionary defines, "empowerment" as "to make (someone) stronger and more confident, esp. in controlling their life and claiming their rights". Women empowerment is a process of enabling women to have access and make productive contributions to

their economic independence, political participation and social development. It consists of greater access to knowledge and resources and also greater autonomy in making decisions. Empowering women to participate fully in economic life across all sectors is essential to build stronger economies for development and sustainability. The Women Empowerment principles are:

- Establish a high level of corporate leadership for gender equality.
- Treat all men and women fairly at work- support human rights and nondiscrimination.
- Promote education, training and professional development for women.
- Promote equality through community initiatives and advocacy.
- Measure on progress to achieve gender equality.

Higher Education of women plays a pivotal role in releasing their energy and creativity and enabling them to meet the complex challenges of the present society. Special emphasis should be given to Research and Development by engaging women in a larger population.

Relationship Between Higher Education and Women Empowerment Higher education definitely raises women's status whether she contributesto the income of the family or not. She can be at par with men. The majority of the women in our country are uneducated that is why they are suppressed. It is the duty of school teachers to tell them that becoming a wife is not their ultimate goal. Their standing up on their feet and being something is important. Education can bring phenomenal change in women's life resulting in social transformation in the long run by inculcating the following attributes among them:

1. Enhancing their confidence
2. Raising their status in the family and society

Obstacles in the path of women empowerment

In the 21stcentury, women began to geteducated and take part in the social, legal economic and political fields. Now women are not in boundaries, they are awakeand moving towards progress. In India, there is the persistent belief that women should not deign to take paid employment although voluntary work was acceptable. Yet, the census 2011 indicates that the literacy rate of women in India is only 64%, i.e. below the average which is 74%. Lack of education is the root base of women's exploitation andignorance. Only education can help women to know about the rights and duties given in the Indian constitution.furthermore, there are some more obstacles that hinder the empowerment of women. These are discussed below:

1. Gender discrimination -The majority of women in India still face gender discrimination at workplace as well as in society. Many societies don't allow women to go out for employment or education. They are not allowed to take independent decisions either for work or for family, and are treated inferior to men. Such discrimination of the women leads to their socio economic decline and hugely contradicts "Woman Empowerment".

2.Social Norms- Many societies in India restrict women from leaving the house, given to their orthodox beliefs and age old traditions. Women in such societies are not allowed to go outside either for education or for employment and are forced to live an isolated and dejected life. Women living under such conditions become accustomed to being inferior to men and are unable to change their present social and economic state.

3. Crimes against Women- Indian women have been subjected to domestic violence and other crimes such as – dowry, honor killing, trafficking etc. It's strange that women in urban areas are more prone to criminal assault than women in rural areas. Even working women in big cities avoid using public transport in late hours, fearing their modesty and life. Women -empowerment can only be achieved in

the true sense if we ensure the safety of our women, providing them the liberty to roam free and without fear, as the men in the society do.

4. Child Marriage- Though, India has successfully reduced child marriages in the past few decades, through a number of laws and initiatives taken by the government; still, a report in early 2018 by the UNICEF (United Nations Children Emergency Fund) states that nearly 1.5 Million girls in India get married before they turn 18. Early marriage reduces the growth prospects of girls who soon be moving onto adulthood.

5. Crimes against Women- Indian women have been subjected to domestic violence and other crimes such as – dowry, honor killing, trafficking, etc. It's strange that women in urban areas are more prone to criminal assault than women in rural areas. Even working women in big cities avoid using public transport in late hours, fearing their modesty and life. Women -empowerment can only be achieved intrue sense if we ensure the safety of our women, providing them the liberty to roam free and without fear, as the men in the society do.

Suggestions for promotion of higher education for women

- Designing education policies and imparting skill oriented education. Meanwhile facilitating by counselling to know the importance of higher education.
- Establishing educational organisations in every place like remote, urban and rural areas to access education easily by women from the pint of security
- Launch of other special schemes for the welfare of women like Pradhan Manthri Sukanya Samridhi (PMSSY)
- Encouraging women for higher education through scholarships for poor and meritorious students in order to assist them financially and to create encouragement both among students and parents, and to make them free from the economic burden.
- Arrangement of a bank loan with less or no interest for women and establishment of colleges and universities for women and also the appointment of women teachers comparing to men teachers

Universities are the Empowering Agents of Higher Education

To be effective agents of empowerment through Higher Education, universities need to give attention to:

- Mass motivation, awareness programmes and mobilization must be organized.
- Dissemination of information through newsletters and other social agencies.
- Literacy Promotion campaign, trainings and development of learning materials.
- Preparation maintenance of data based information regarding girls' education and use of technology.
- Strong Network Culture, monitor activities related to women's studies and women's movements and recommend better implementation.
- Women and Research: The University Grants Committee has agreed to provide part-time research associateships to 100 girls every year

Conclusion

Empowerment of women strongly is associated with the level of education i.e. higher the level of education greater the empowerment of women. It could be concluded that there is no doubt about the essential need of empowering women through higher education. Now it is cleared that only literacy is not the ultimate solution but women should be highly educated to know their rights and duties. And should be able to use their rights as per the need. But it is also mandatory that there should proper implementations

of what policies are made and what government of India has made different programmes regarding women empowerment.

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Impact of
ICT on Higher Education

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Abstract

Education has played a vital role in Nation Building. Information and Communication Technology (ICT) has also played a very significant role in Transforming Higher Education. Information and Communication Technology in Higher Education not only add value to teaching but also increases the effectiveness of learning. With best possible use of ICT in Higher Education it prompts our country education system to become a Knowledge Superpower. In the present 21st century the use of ICTs in education and its related activities are creating an extraordinary growth. Through ICT education can be imparted via E-Learning Courses, Blended Learning, Face to face Learning, Distance Learning and Self-Paced Learning Courses. The use of ICT in Education can help the learners who are living in remote areas to access the digital resources at any time and at any place. Many ICT initiatives like SWAYAM (Audio- Video e-content), National digital Library (Digital Content), e-Yantra (Accelerated hands on learning), SAMARTH (E-Governance), VIDWAN (Track Your progress), etc. has been highlighted by MHRD in order to promote Technology enabled learning. Despite of all these initiatives , there are some factors which creates a major hurdle in the implementation of ICT like Digital Divide continues to prevails among the learners; as technology keeps on changing so every trainers need to get themselves trained with the updated Content but they(trainers) resist; because of too much importance been given to information technology , Student's start indulging themselves in copying information from internet rather than learning and developing new skills of their own. So, after facing all these hurdles steps must be taken to mitigate all these barriers by adopting proper measures. .The aim of this research paper is to highlight the various impacts of ICT on higher education and also provides various details regarding potential future developments. In the earlier phase of time focus was on Learning but with the change in Technology this focus shift from LEARNING to SMART LEARNING which can be possible only through ICT.

Keyword: -Information and Communication technology, Impact, Initiatives, Education

Introduction

Advancement of technology has brought many benefits throughout the world. It has converted the entire world into Global village. With the help of Information Technology we can access any information Round-the-clock. Even education and research sector has not remained outside the scope of Information

and communication technology. In the Modern era, in spite of deliveringlectures in the classrooms, E-content is also delivered by the Instructor's on web portals.Virtual learning has also enabled learners all over the world to study the relevant material required by them, but the instructor is not physically present with the learners here. ICT has empowered the employed and young learners to get certifications from overseas universities without getting out of their home land. Information and Communication technology includes not only computer aided technologies but also include audio-visual aids. In the current era, too much ICT related products are available which are giving importance to education such as teleconferencing, PowerPoint Presentations, e-mails, etc. all theseICT products are used as per their suitability.

Review of Literature

Kina-Sam Hong and Peter Songan (2011) asserted that ICT in higher Education in Southeast Asian region is not readily available and they also stated a fact that countries in this region are categorized into three stages on the basis of their ICT development. Hadiya Habib (2017) "Information and Communication Technology in Higher education In India: Challenges and Opportunities" stated that ICT has potential in transforming higher Education in India. Ronald M.Hernandez (2017) Impact of ICT on Education: Challenges and perspectives stated that now days ICT has become part of Education system. In this technological era we can't think of Education without information Technology.Manisha, Anju (2014) in their research paper "Role of ICT in Higher Education in India" states that Information and communication technology is helpful for the transformation of Educational Practices.

Objectives

The main objective of conducting this research is:

To Study the Impact of ICT on Education

To bring major ICT Initiatives into Spotlight.

Major Initiatives in Information and Communication Technology

Numerous attempts have been made in India in order to promote Informationand Communication Technology like Lekhika was launched in 2007 in order to widespread computer literacy among those masses who don't know English. Brihaspati (an open source e-learning Course) developed by IIT-Kanpur. Shruti- Drishti was one of the most important initiatives whose focus was on visually impaired women empowerment (VIWE). GRID GARUDA is one of the India's first National grid. The main aim of this gird is to bring together academic, scientific and research committee for the development of their Database. A part from all these some initiatives are given by MHRD like SWAYAM "Study Webs of active-Learning for young aspiring Minds'' is basically introduced by Government of India to approach those masses who are remain uncovered by digital revolution and many more initiatives like National Digital Library is a project which was started by MHRD, this digital library contains textbooks, articles, videos and audio lectures, which can be easily accessible by any person free of cost. SWAYAMPRABHA and e-Yantra are also among those initiatives which are taken by MHRD for the promotion of ICT.

Impact of ICT on Education

Just like a coin has two sides, similarly the Information and communication technology have positive as well as negative impact upon the higher education which are discussed as follow:-

1.1 Transforms learning Process:- The main aim of ICT is to make the learner aware regarding the use of computer in their learning process. ICT has changed the relationship between learner and instructor. Earlier, the learner was completely dependent upon instructor for learning. ICT has shift the focus of learner from dependency to self-reliance.

1.2 Rapid Transmission of information :- Through Online lectures e-content will be made available to the learners within a short span of time

1.3 New idea formation: - ICT has been used for the transformation of concrete ideas into realizable goals. It has been used globally not only for learning purpose, but also for many other related activities.

1.4 Curriculum development:-ICT is now days used as a one of the most important tool for the development of education. Without ICT it's not possible for any Institutions to attain heights.

1.5 Digital Divide: - ICT creates digital –divide among the student's. It will reap benefits for those who are familiar with the Information technology than those who aren't computer savvy.

1.6 Major goal diverted: - Sometimes ICT may shift the focus from learning of knowledge content towards development of Information and communication skills.

1.7 Not accessible to all: - Only those learners can attain the benefit from ICT those who can have access to the internet facility.

1.8 Imitation issue: -learners start emulating information from the internet, rather than developing new skills of their own.

1.9 Transactional distance Increases: - Due to information technology, the bond between learner and instructor is affected. The transactional distance increases because learner is not actually physically resent where the lecture is being delivered by the Teacher.

Recommendations

Aswe know education is considered to be one of the most important pillar for the development of the society.

Now a day, learning is necessary, but smart learning is most important which is possible only through Information and communication technology. Smart learning is possible only through digital device, but we resist to use digital device due to our conventional teaching methods. So, Firstly, Instructors need's to adapt the ICT and smart digital devices in their Teaching methods only then they can suggest someone else about the same. Secondly,instructors need to create awareness among the society regarding the fruitful effect of ICT on education. Last but not least, Internet service provider's needs to keep their Internet cost low only then it will be used by the people in society to the maximum possible extent.

Conclusion

From the above discussed paper it can be concluded that ICT has played a significant role in Transforming education and other related sectors. Information Technology has so much affected the education system that Face - to- Face learning which was used in conventional teaching methods was replaced by Electronic learning, Blended Learning, Self- paced learning, Online collaborative learning and Distance learning courses, etc. . With the help of all these courses learner can study any concept and at any time.

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Nutrition Education in Higher Educational Institute for Improving Social Scenario

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Abstract

The increase in obesity and illnesses, for example, diabetes and coronary diseases globally mirrors the unpredictable interactions of science, individual conduct, and condition. Consequently, there has been greater recognition of the importance of nutrition education. A detailed investigation of the proof from 300+ studies shows that nutrition education is more likely to be effective when it focuses on behaviour/ action (rather than knowledge only) and systematically links theory, research, and practice.

There are three essential components of education on nutrition:

1. A motivational part, where the goal is to increase awareness and enhance motivation by addressing beliefs, attitudes through effective communication strategies.

2. An action part, where the main goal is to facilitate people's ability to take action by goal setting and cognitive self-regulation techniques.

3. An environmental part, where nutrition educators work with policymakers and others to promote environmental supports for action. Each component needs to be based on appropriate theory and research.

The procedure for program design can use the logic model: Inputs are the resources needed as well as the needs analysis process. The outputs are the activities within the three components of nutrition education described above. Here the behavioural focus is selected and theory and research are used to design appropriate educational plans to achieve the aimed behaviours. The results are the short, medium or long-term effects of the nutrition program. These are assessed by the use of appropriate designs and instruments. Nutrition based education programs that link research, theory, and practice are more likely to be effective in higher studies.

Key Words: *nutrition education, linking nutrition theory and practice, health promotion*

Introduction

The increase in obesity and chronic illnesses like diabetes and heart disease worldwide reflects the complex interactions of biology, personal behavior, and the environment. As shown in Figure 1, people's food choices are influenced by many factors:[1,2]

Biologically determined behavioral predispositions include humans' liking at birth for sweet and dislike for bitter and sour, hunger/ satiety mechanisms, and sensory-specific satiety. Experience with food. Humans have the capacity to learn to like foods through associative conditioning, both physiological and

social. Young children overcome their fear of new foods (neophobia) through repeated experience with new foods, offered by the family and often reflecting cultural preferences, leading to familiarity.

These two sets of influences are sensory-affective in nature and contribute greatly to people's food preferences.

Personal factors. Intra-person factors such as beliefs, attitudes, knowledge and skills and social norms, and inter-personal factors such as families and social networks also influence our food choices.

Environmental factors powerfully influence peoples' food-related behaviors as well. Food availability and accessibility as well as the social environment and cultural practices, material resources, and food marketing practices either help or hinder individuals from being able to act on their beliefs, attitudes, and knowledge about healthful eating.

As can be seen from Figure 1, food-related knowledge and skills form only one category of influence on diet-related behaviours or practices among numerous others.

Defining nutrition-based educational service: Consequently, in the present nutrition awareness scenario, there is a need for nutrition-based educational service to be much more inclusive than information dissemination for being moreinfluential. Nutrition based educational service needs to referpreferences of food stuffs and organoleptic factors; factors influencing individualsuch as one's perceptions, beliefs, attitudes, meanings as well as social norms; and other factors which involve environment and surroundings. Nutrition based educational servicecan be illustrated as "any combination of educational strategies, accompanied by environmental supports, designed to facilitate voluntary adoption of food choices and other food and nutrition-relatedd behaviors conducive to health and well-being; nutrition education is delivered through multiple venues and involves activities at the individual, community, and policy levels."[1]

Using theory and research to increase nutrition-based educational service effectiveness: Programs related to Nutrition based educational serviceare designed to facilitate modification based on personal dietary as well as has provision to adapt to environmental changes. These facts can be drawn on the basis of research and theory-building formats such as social psychology, health education, anthropology or economics, as well as from nutrition based educational service and behavioural nutrition research.

Observations of the evidence can be concluded from over 300 studies that show nutrition based educational service which is more likely to be effective when its prime focus is on behaviour/action (rather than knowledge only) [3-6]. Most of the educationalists based on nutrition are acquainted with the KAB model, which states that modifications in knowledge (K) may lead to changes in attitudes (A) which in turn lead to changes in behaviour (B).

However, research has shown, and Figure 1 illustrates, that this is too simple a theory or model for guiding effective nutrition education.[7-9]

The model shows that a number of factors are important in motivating the intention to change and other factors are important in translating motivations and intentions into behaviour change or action. It also shows that the environment is important as either a facilitator or barrier to change.

This model can provide a basis for designing nutrition education. Nutrition education can be considered as having three essential components:

1. A motivational phase, where the goal is to increase awareness and enhance the motivation of the intended audience. Here the focus is on why to make changes.

2. An action phase, where the goal is to facilitate the ability to take action. Here the focus is on how to make changes.

3. An environmental component where nutrition educators work with policymakers and others to promote environmental supports for action. The motivational phase focuses on increasing awareness and enhancing the motivation of the intended audience. [10]

Figure 1: Influences on Food Choice

A needs analysis found that people are very aware that there are advantages to taking action – eating lots of fruits and vegetables – but believe that the barriers are high. So the campaign focuses on decreasing barriers with the simple message that eating fruits and vegetables is easy. A picture of a banana is accompanied by the message, "Peel. Eat. How easy is that!" The picture of an apple states, "Wash. Eat. How easy is that."

The venues for the messages are posters, bill-boards, classroom activities, and newspaper articles. These messages are designed to change beliefs about barriers and hence improve attitudes. They also enhance people's sense of control, thus increasing their self-efficacy. Programs can also provide opportunities for the audience to taste healthful foods prepared in delicious and tasty ways. Such experiences with foods will increase their beliefs about the positive outcomes of eating these foods. Interventions can also focus on social norms. For example, breastfeeding is very influenced by the attitudes of the culture, the woman's family, and the father of the infant. Nutrition based education can help women recognize these influences and develop strategies for coping with family and culture.

The action component focuses on facilitating the ability of the intended audience to take action. Many people will make intentions to adopt healthful eating. However, acting on their intentions is very difficult. Action phase activities help people make the bridge the "intention to action" gap and to actually make changes and maintain them over time. Research has shown that when people make specific action plans, they are more likely to take action. This process is often referred to as goal-setting.

Here people make goals or action plans that are very specific, such as I will bring fruit to work to eat at my morning break or I will replace my sweet dessert at dinner with fruit 3 times this week. An example is an EatFit program where middle school students choose one major goal to work on, such as increasing their fruit and vegetable intake or reducing their sugar intake.[11] They then set specific action plans for how they will do that. They must also learn self-regulation or self-management skills and develop personal

habits and policies that will help them maintain healthful eating. In addition, the intended audience needs to learn food and nutrition-related knowledge and skills so that they can act on their motivations.

Here nutrition educators work with policymakers and others to promote environmental supports for action. Nutrition education is needed now more than ever; programs that link research, theory, and practice are more likely to be effective.

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Accreditation and Regulations in Indian Higher Education System

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Abstract

In this paper, we discuss the higher education system in India along with the Accreditation.Today, the instructors who lead these activities have been trained in higher education institutions. These programs prepare education-related professionals including all professional teachers. Within the framework of the curriculum prepared by experts and institutions, the primary responsibility is to conduct teaching effectively and to contribute to the holistic development of students. The nodal ministry for education in India is the Ministry of Human Resource Development (MHRD). The MHRD has a Department of Higher education which is the apex department "for the overall development of the basic infrastructure of the Higher Education sector". The University Grants Commission (UGC) under the Department of Higher Education in the MHRD acts as the coordinator as well as a prescriber of standards for education in the country. The accreditation of higher educational institutions in India has remained a contentious issue. Several autonomous bodies function to grant accreditation. Foremost among them are the National Assessment and Accreditation Council (NAAC), and the National Board of Accreditation (NBA). Accreditation of higher educational institutions was made mandatory under UGC (Mandatory Assessment and Accreditation of Higher Educational Institutions) Regulations, 2012. The institutions are accredited for a period of five years and this status was tied to the funds which they would receive from the UGC. Accreditation for higher learning is overseen by 12 autonomous institutions established by the University Grant Commission. NAAC has developed after wide consultations, 50 indicators, assimilated into 7 criteria, as quality benchmarks for accreditation of universities. The information and library network (INFLIBNET), an inter-university center (IUC) under the UGC, has reported that there are 150 areas in which research has been undertaken in 37central universities.

***Keywords:** Higher Education, Accreditation*

Introduction

The overall scenario of higher education in India does not match with the global quality standards. It does not foster global competencies and even does not make a significant contribution to national development. Though, it is said that the destiny of the nation is shaped only in the classrooms, very little importance is being given to classroom teaching. The role of the teacher assumes greater significance in this deteriorating scenario of higher education. It is a daunting task for the teachers to improve the

quantity, quality, and equality in higher education. It is said that a good teacher can bring the entire world to the class. It has been found that only 10 % of Indian youth go to college. This percentage is 40-50% in developed countries. As per the available reports, two-third of the Indian universities are providing sub-standard education while 90 % of colleges in India are below average. The higher education sector in India spends 4.1% of the country's research fund. It is 17.0% in Germany; 22.6% in U.K. and 10.1% China. The research manpower in China is 8.6 lakhs; in India 1.3 lakhs. Every institution has Lecturers, Assistant professor, and Professor; and all are expected to do research. Today, most of the institutions have become a factory of degrees only. Both Students and teachers are running after attaining or providing degrees and not towards the gaining knowledge and wisdom. Attendance in the institution has dropped drastically and classroom teaching is becoming only a ritual, to be followed mechanically. The Constitutional amendment of 1976 places all higher education, including technical education, in the concurrent list of the Government of India and States for promotion, co-ordination, determination, and maintenance of education. During the last 50 years, the Government has also established and supported a large number of high-level institutions, Central Universities as well as provided aid to Universities set up by State Governments. There has been a Scientific Policy Resolution passed by the Parliament in 1958 promoting the study of science. A National Policy of Education was adopted by the Parliament in 1986 and modified in 1992. Today, the instructors who lead these activities have been trained in higher education institutions. These programs prepare education-related professionals including all professional teachers. Within the framework of the curriculum prepared by experts and institutions, the primary responsibility is to conduct teaching effectively and to contribute to the holistic development of children and adolescents. It is possible to conduct effective teaching if teachers have sufficient knowledge, skills, and attitudes towards their profession. As these qualifications are gained through higher education, the goals and contents of the educational program for teachers should be aligned with the curriculum courses in institutions. A person who wants to become a teacher begins the education program, and graduates from having attained these objectives. After graduating, the prospective teacher becomes a teacher in training for a certain period of time, and then a fully accredited teacher.In the 21ST century, World Conference on Higher Education: Vision and Action held at UNESCO Headquarters in Paris (October 5 to 9, 1998) attended by nearly 5000 participants representing 180 countries. It adopted an Action Plan for reforms in the field of higher education. That conference focused on higher education must serve the interest of sustainable development and help build a better society. The highlighted features of the World Declaration on Higher Education adopted in the conference are given below:

- Higher education shall be equally accessible to all on the basis of merit keeping in mind Article 26.1 of the Universal Declaration of Human Rights. Higher Education should uphold education's role of service to society.

- Higher education institutions should be committed to transparent internal and external evaluations conducted openly by independent specialists.

- The potential for Information Communication Technology (ICT) should be fully utilized. Equitable access to these should be assured through international cooperation and support to countries that lack capabilities to acquire such tools.

- Higher education should be considered a public service.

- Quality of education is a multi-dimensional concept, which should embrace all functions and activities that are teaching, academic programmes, research and scholarship, staffing, students, infrastructure, and academic environment.

- While diverse sources of funding are necessary, public support for higher education and research remains essential to ensure balanced achievement of its educational missions.

- The partnership should be forged between higher educational institutions and responsible state authorities.

- The international dimension of higher education is an inherent part of quality. Networking which has emerged as a major means of action should be based on sharing, solidarity, and equality among partners.

Accreditation&Regulationin Indian Higher Education

- There are basically two agencies in India regulating Higher Education – University Grants Commission (UGC) (1956) and All India Council for Technical Education (AICTE) (1987). Both these institutions are under the Ministry of Education, which holds them in a vice-like grip. In order to evaluate the performance of an institution and bring about a measure of accountability, a mechanism of accreditation has been developed by UGC. This is an autonomous council under UGC called the National Accreditation and Assessment Council (NAAC) with a purpose to carry out periodic assessments of universities and colleges. NAAC has evolved a methodology of assessment that involves self-appraisal by each university/college and an assessment of the performance by an expert committee. Similarly, for technical education, AICTE has established its own accreditation mechanism for its institutions through the National Board of Accreditation (NBA). NBA has also undertaken a detailed exercise for benchmarking the performance of reference for evaluation if performance can be initiated.

- Both the NAAC and NBA are in the right direction and need to be encouraged and strengthened. There is a need to link grants and loans to NAAC and NBC reports. This can be done when NAAC and NBC are made applicable to all Higher Education Institutions. UGC has already indicated that development support will be related to the outcome of the NAACs report. The objective of these centres is to provide quality inputs in higher education and research areas. Further, to cut costs of undertaking good research, especially in sciences, Inter University Centres in nuclear science, crystal growth, astronomy and astrophysics, social sciences and humanities have been formed.

- Professional councils are responsible for recognition of courses, promotion of professional institutions and provision of grants to undergraduate programmes. As of today software development does not have a statutory council. NASSCOM is generally accepted as the equivalent to a council.

- Research Councils: A number of them have been setup under the Central (federal) government.

- With India emerging as a global hub for commercial R&D (India Today International, 3 Oct 2005), R&D within the scope of Higher Education has gained greater importance. It has been stated that 150 international firms have set up R&D centres in India.The demand for high-quality researchers will require the expansion of postgraduate research and PhDs in Indian institutions of higher learning. Research and Development: while R&D centres have been established in many disciplines, the concept of centres of excellence in different subjects

- Open Universities in India have also developed to encourage distance learning. Indira Gandhi National Open University (IGNOU) was the pioneer and now there are many open universities in India offering over 500 courses. IGNOU has about 11,87,100 students on its rolls. They also maintain a close relationship with the industry and especially helpful to those who cannot afford a regular education due to high cost or lack of time as they are already employed.

- The government has created 221 Universities of which (6 are central Universities while 156 are state Universities). There is also a concept of Deemed University. This status is given by UGC to colleges of exceptional excellence. There are 39 Deemed Universities plus seven open universities. There are 9703 colleges in India that provide mostly bachelors or sometimesa Master's level of education. Of these, only 550 are engineering and technical colleges, 655 medical and 600 management institutions.

- UGC is empowered under its Act to grant institutes of excellence 'Deemed University' status which

they have done in 39 cases. There are, however, no private Universities so far. A Private Universities' Bill has been proposed in the Parliament but has not been approved so far. All self-financing colleges, therefore, have to also seek affiliation with a University.

- Integration of University and vocational education has been attempted in India as it was earlier attempted in Europe. In a recent innovation, the vocational curriculum has been introduced at the bachelor's degree level by permitting one of three subjects to be a vocational one. Nearly 1500 colleges have been given facilities for vocational education.

- Besides unattractive compensation packages, the recruitment procedure is a lengthy and working environment not conducive to retention. In a recent move, UGC has further damaged the pay and promotion prospects of college teachers by reducing promotional grades thereby creating more stagnation and frustration amongst college teachers. (Economic Times, 15 November 2005).

Conclusion

After this brief study on higher education and accreditation in the country, it can be concluded that a lot of scientific programmes are being implemented by Govt. of India as well as state governments to promote the research and higher education standard. Since there are basically two agencies in India regulating Higher Education University Grants Commission (UGC) (1956) and All India Council for Technical Education (AICTE) (1987). Both these institutions are under the Ministry of Education, which holds them in a vice-like grip and promote the education system in India. Although departments of education and universities are able to expand the education fora sustainable development besides, education and research through distance learning can also be an option to strengthen ESD in higher education in the country.

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Opportunities and Challenges of ICT in Higher Education

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Abstract

Since time immemorial, education has been an important instrument for social and economic transformation. Presently higher education in India is experiencing a major transformation in terms of access, equity, and quality. This transition is highly influenced by the swift developments in information and communication technologies (ICTs) all over the world. The introduction of ICTs in higher education has profound implications for the whole education process especially in dealing with key issues of access, equity, management, efficiency, pedagogy, and quality. At the same time, the optimal utilization of opportunities arising due to the diffusion of ICTs in higher education system presents a profound challenge for higher educational institutions. In this backdrop, the paper addresses the opportunities and challenges posed by the integration of ICTs in various aspects of higher education in the present scenario.

***Keywords:** Information and Communication Technology (ICT), Higher Education, Quality, Accessibility.*

Introduction

Nowadays higher education in India is experiencing a major transformation in terms of access, equity, and quality. This evolution is highly influenced by the swift developments and communication technologies (ICTs) all over the world. Higher education systems have grown rapidly from the last few years to meet the demands of quality education for all. One of the distinctive features of human beings is their ability to acquire knowledge and what makes this knowledge to man's ability to 'impact 'this knowledge to others. Transfer of knowledge, which is one of the foundations of the teaching-learning process. The concept of moving traditional classrooms of desks, notebooks, pencils, and blackboard to an online forum of computers and the internet frightens many teachers who are comfortable with the face-to-face interaction of the traditional classroom. Computer-based systems have great potential for delivering teaching and learning material. The rapid development of Information and Communication Technology (ICT), particularly the internet, is one of the most attractive miracles describing the Information Age. The term Information refers to any communication or representation of knowledge such as facts, data or opinions in any medium or form, including textual, numerical, graphic Cartographic, narrative or audio-visual forms. Technology is the practical form of scientific knowledge or the science of the application of knowledge to practical.

Objectives

- ICT in higher education improves self-confidence among teachers and students.
- It can be easily accessible from anywhere even from a rural area. This is actually modern techniques of teaching & shifting of traditional way of teaching method to modern techniques.
- It promotes innovation and new opportunities to learners as well as teachers.

Benefits of ICT in Higher Education – For Teachers:

1. Increased right to use
2. The flexibility of comfortable delivery or transform
3. Combination of work & education
4. Updating of knowledge from time to time

For Students:

1. Learner centric approach
2. Higher- quality of education and new ways of interaction
3. Cost-effective professional development
4. Upgrading of employee skills increased productivity

For Educational institutes:

1. Developing a new culture of learning
2. Increase the capacity and cost effectiveness of education and training systems
3. To reach target groups with limited access to conventional education and training,
4. To support and enhance the quality and relevance of existing educational structures
5. To compete international educational institute to adopt new techniques of learning

For Governments:

To ensure the connection of educational institutions and learner to the emerging networks and information resources

To promote innovation and opportunities for enthusiastic learning Drawback of ICT tools in Indian

Higher Education:

1. Setting up ICT tools can be very difficult.
2. Highly Expensive to adopt.
3. Difficult for teachers to use with a lack of knowledge and experience using ICT tools.
4. Lack of support for institutional management.
5. Cause of Indian mentality to accept new things & challenges of using ICT tools in higher education.
6. Lack of awareness about the benefits of ICT tools in Higher Education.
7. Lack of Support of Government to promote ICT tools in education in terms of financial & economic assistance.
8. In India, most of the people are from the rural area, they are unaware of higher education and the use of ICT is far distance away.

9. Distance education is a new concept to Indians which has lot of benefits but Distance learners, as well as teachers both, are unaware of the usage ICT tools.

Initiatives of Use of ICT in Education India is making use of a powerful combination of ICTs such as open-source software, satellite technology, local language interfaces, easy to use human-computer interfaces, digital libraries etc. with a long-term plan to reach the remotest of the villages. Community service centres have been started to promote e-learning throughout the country (Bhattacharya and Sharma, 2007).

Initiatives of Use of ICT in Education

India is making use of a powerful combination of ICTs such as open-source software, satellite technology, local language interfaces, easy to use human-computer interfaces, digital libraries etc. with a long-term plan to reach the remotest of the villages. Community service centres have been started to promote e-learning throughout the country (Bhattacharya and Sharma, 2007). Notable initiatives of use of ICT in education in India include:

- Indira Gandhi National Open University (IGNOU) uses radio, television and internet technologies.

- National Programme on Technology Enhanced Learning: a concept similar to the open courseware initiative of MIT. It uses internet and television technologies.

- Eklavya initiative: Uses the internet and television to promote distance learning.

- IIT-Kanpur has developed 'Brihaspati', an open source e-learning platform (Virtual Class Room).

Potential Drawbacks-cum-Challenges to Using ICT in Education

While using ICTs in education has some obvious benefits, ICTs also bring challenges. First is the high cost of acquiring, installing, operating, maintaining and replacing ICTs. While potentially of great importance, the integration of ICTs into teaching is still in its infancy.

The four most common mistakes in introducing ICTs into teaching are i) installing learning technology without reviewing student needs and content availability; ii) imposing technological systems from the top down without involving faculty and students; iii) using inappropriate content from other regions of the world without customizing it appropriately; and iv) producing low-quality content that has poor instructional design and is not adapted to the technology in use (UNESCO, 2009). Although ICT offers a whole lot of benefits there are some risks of using ICT in education which have to be mitigated proper mechanisms. They are:

- It may create a digital divide within the class as students who are more familiar with ICT will reap more benefits and learn faster than those who are not as technology savvy.

- It may shift the attention from the primary goal of the learning process to developing ICT skills, which is the secondary goal.

- It can affect the bonding process between the teacher and the student as ICT becomes a communication tool rather than face to face conversation and thus the transactional distance is increased.

- Also, since not all teachers are experts with ICT, they may be lax in updating the course content online which can slow down the learning among students.

- The potential of plagiarism is high as the student can copy information rather than learning and developing their own skills.

- There is a need for training all stakeholders in ICT.

- The cost of hardware and software can be very high.

Conclusion

The increasing use of information and communication technologies (ICTs) has brought changes to teaching and learning at all levels of higher education systems (HES) leading to quality enhancements. Traditional forms of teaching and learning are increasingly being converted to online and virtual environments. There are endless possibilities with the integration of ICT in the education system. The use of ICT in education not only improves the classroom teaching-learning process but also provides the facility of e-learning. ICT has enhanced distance learning. The teaching community is able to reach remote areas and learners are able to access qualitative learning environment from anywhere and at any time. It is important that teachers or trainers should be made to adopt technology in their teaching styles to provide pedagogical and educational gains to the learners. Successful implementation of ICT to lead change is more about influencing and empowering teachers and supporting them in their engagement with students in learning rather than acquiring computer skills and obtaining software and equipment. ICT enabled education will ultimately lead to the democratization of education.

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Fostering Innovation in Higher Education: Converting Scrap to Trends

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Abstract

Very well said, "Give a man a fish and you feed him for a day; teach a man to fish and you feed him for a lifetime". Higher education is a tool that teaches us how to fish and helps a person to become independent. It contributes to national development through the dissemination of specialized knowledge and skill. It helps to promote independent thinking, creativity, a spirit of innovation and motivation for setting a challenging and achievable goal. Higher education helps initiate and nurture, research and developmental activities. The research branch of academics is a prime source of knowledge and innovation. India has a large, vibrant and fast-growing economy and has a large number of young people in the employable age. Moreover, entrepreneurship and skill development are the key drivers for generating wealth from knowledge. So, entrepreneurship and innovation is the best tool to cater to the employment needs of the current generation. This paper aims to develop innovative designs using patchwork and other surface enrichment techniques using boutique waste to offer a wide platform to upcoming designers.

Introduction

"The knowledge is the third eye of man, which gives him insight into all affairs and teaches him how to act. In the spiritual sphere, it leads to our salvation, in the mundane sphere it leads to all-round progress and prosperity. The illumination given to us by education shatters illusion removes difficulties and enables us to realize the true values of life." (A.S.Altekar)

Education is one of the significant factors responsible for the development of a country. Indian higher education system has undergone massive expansion in post-independent India. Several Universities, Technical Institutes, Research Institutions, and Professional / Non-professional Colleges are established all over the country to providing easy access to higher education to the common Indian.According to MHRD, **ALL INDIA SURVEY ON HIGHER EDUCATION (2018-19)**, there are 993 Universities, 39931 Colleges, and 10725 Stand Alone Institutions. Total enrolment in higher education has been estimated to be 37.4 million with 19.2 million males and 18.2 million females.

Besides such a high number of educated people in our country, unemployment is also increasing at an alarming rate. The only tool which can prevent our economy and unemployment is entrepreneurship as it is likely to create new jobs and opportunities. It's high time to create the right floor for innovative entrepreneurs. Taking the innovation, entrepreneur, and sustainability in mind an attempt has been made to utilizing boutique waste in designing and construction of Odhanis with patchwork and embroidery

Objectives

Main objectives of the study were:-

- Designing of odhanis.
- Construction and ornamentation of six most preferred designs of odhanis.
- Finding the market ability and consumer acceptability.

Methodology

The various steps to achieve the objectives were as follows:

Designing of odhanis with patchwork under three different categories.

A total of 45 odhanis were designed on a 1/5 scale under three categories. Each category had 15 designs. The category were-

- Odhanis with all over design.
- Odhanis with a design emphasis on pallu and centre.
- Odhanis with a design emphasis on border and centre.

2. Evaluation of designs

All the designs of odhanis were displayed according to the category. A panel of 30 judges including the faculty of clothing and textile department, students of post-graduation and under-graduation of Govt.Home Science College was selected. The judges were asked to give the ranks in order of their preferences for each design. According to the ranks given by judges, marks were allotted to designs. For example, Rank- 1 got 15 marks, Rank- 2 got 14 marks, Rank- 3 got 13 marks and so on. The total score was calculated for each design by multiplying the frequency with the marks allotted. Top 2 designs with the highest scores were selected from each category for final construction.

3. Sourcing of material

Sourcing of material was done in two steps:-

a) Boutique survey.

b) Market survey.

    a) Boutique survey- A boutique survey was conducted to collect leftover cotton fabrics from the various boutique of Chandigarh. Only Cotton fabric was collected. The collected fabrics were categorised into six categories depending upon their tints and tones like Pink and Purple, Green and Yellow, Red and Black, White and Indigo, Blue and Violet, Red and orange. To estimate the fabric required for each odhani, standard size (length- 92″ and width- 35″) was taken. One design was considered at a time, various shapes were multiplied to their dimensions including seam allowance of ¼″ all around. The available leftover pieces were then sorted according to their suitability to a particular design.

    b) Market survey- A market survey was conducted to source matching or contrasting cotton fabric with collected fabrics from various boutiques.

4. Construction, surface embellishment and finishing of six selected designs of odhanis

Top six selected designs of odhanis were finally constructed from each category.

- Marking and Cutting – The required shapes from a particular fabric were drawn on the wrong side of the fabric, keeping in mind the grain lines and $1/4^{th}$ inch seam allowance was added all around. The pieces were cut using sharp shears and were safely kept in a box till use.

- Stitching-While stitching, seam allowances were kept on right side of odhani which were further finished using strips of fabric.
- Surface embellishment – Various motifs of Kantha and KJutch embroidery were collected, Out of which suitable motifs according to odhani were traced and hand embroidered using anchor threads.

5. Costing of odhanis

Before checking the marketability and consumer acceptability of odhanis, the cost of final product was calculated by adding the cost of:-

- Fabric.
- Sewing threads.
- Embroidery labour.
- Construction labour.

Calculation of selling price:-Sale price was calculated by adding 20% profit to the cost price.

6. Finding the marketability and consumer acceptability of constructed odhanis

- Marketability: Marketability of the final products was checked by surveying leading fashion stores of Chandigarh. A questionnaire was prepared and responses were noted down from the owners of the shops. The data was then calculated and analysed.
- Consumer acceptability: To check the consumer acceptability of odhanis, an exhibition was put up for the prospective buyers i.e. the girls and women of the Govt. Home Science College, Sector 10-D, Chandigarh. In this exhibition, six constructed sets were displayed with their sale price and consumer were asked to fill a performato note down their responses about overall appearance and quoted price. The data were then calculated from the response.

Results and Discussion

1. Evaluation of the most preferred designs of odhanis: Forty five designs under 3 categories were evaluated by judges for the selection of two best designs under each category for final construction.

Category- A

Selection of two most preferred designs under category A, of odhani.

Design no.	Marks	Rank
13	357	1
6	334	2

Category- B

Selection of two most preferred designs under category B, of odhani.

Design no.	Marks	Rank
7	347	1
4	322	2

Category- C

Selection of two most preferred designs under category C, of odhani.

Design no.	Marks	Rank
4	376	1
15	345	2

2. Costing of constructed odhanis

Before checking the marketability and consumer acceptability of constructed odhanis, the cost was estimated that had been shown in table no.1

Design no.	Cost of fabric (Rs.)	Cost of sewing threads (Rs.)	Construction Labour(Rs.)	Embroidery labour (Rs)	Total (Rs.)
13A	670	10	200	400	1293
6A	400	10	200	300	9160
7B	775	10	200	300	1292
4B	615	10	200	500	1329
4C	700	10	200	400	1314
15C	550	10	200	300	1075

3. Marketability of odhanis A market survey was conducted to see the marketability of constructed odhanis.

- The designing of odhanis was greatly appreciated by shopkeepers.
- According to 75% of shopkeepers the quoted price was reasonable and perfect forselling.
- 90% of shopkeepers were interested to place the order for marketing.

Constructed odhanis are:-

Design-13A   Design-6A   Design-4B

| Design-7B | Design-4C | Design-15C |

Conclusion

Patchwork provides a wide platform to play with shapes and colors. It is subjected to creativity by changing shapes and their ornamentation which would serve a dual purpose of introducing something to a world of textile designing with combination of two needle art forms using creativity and imagination has a widen the scope in textile industry. To conclude the execution of the study revealed the charm of patchwork and embroideries. The outcome was very interested. The design was appreciated and thought of as new idea which had tremendous potential as a saleable product. The study would be a great significance to budding designers in providing a wide platform to play with shapes and colourssimultaneously providing opportunity to start up a new entrepreneur.

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Contemporary Issuesof Higher Education System in the Twenty-First Century

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Abstract

Education is a very important factor in the development of a country. Higher education, also called post-secondary education, third-level or tertiary education, is an optional final stage of formal learning that occurs after completion of secondary education. It is delivered at universities, academies, collegesand institutes of technology, and through certain college-level institutions, including vocational schools, trade schools, and other career colleges that award degrees.We should make it appropriate according to the time and changing scenario of the world. Education provides an opportunity to reflect upon the social, economic, cultural, and moral issues facing by a human being. India needs to focus on education for more educated and efficient people to drive our nation. In the world, there are many Indians who well known for their capabilities and skills. To develop India as a digital nation or to become a prosperous partner in global development, India has to strengthen higher education with research and development. This paper is mainly focused on the overall scenario of higher education in India. This paper aims to identify issues and challenges in the field of higher education in India. Finally, the paper concluded here is all stakeholders have to make a joint effort to get solutions for the problems in higher education in India. Tertiary education at a non-degree level is sometimes referred to as further education or continuing education as distinct from higher education.

Keywords*: Higher Education, Contemporary issues,Post Secondary Education, Twenty-first century*

Introduction

India is developing the country and to achieve our goal we have to strengthen our higher educationsystem. The continuing growth of the middle classin India (approximately 200 million people) has ledto increased demand for higher education and weknow that this demand cannot be met by the IndianHigher Education system. Although the Indiangovernment is planning to establish newuniversities and colleges in the near future, thesewill not be enough to provide places for all studentswho seek higher education. If we think that whatwill India be like 25 years from now? Then we canfind in some areas we can estimate quantitativelywith a fair degree of confidence. In some others, weknow the broad direction but are unable toreasonably put numbers to the country's likelyaccomplishment. Here we can indicate what wouldbe most desirable and point out the opportunitiesand obstacles that will arise along the way. Theobjective of the study is to identifyissues andchallenges in the field of higher education in India.

Research in Higher Education

The higher education sector in India spends 4.1% of the country's research fund. It is 17.0% in Germany; 22.6% in U.K. and 10.1% China. The research manpower in China is 8.6 lakhs; in India 1.3 lakhs and even in Korea it is 1.5 lakhs. Higher education scene in India should kindly be looked into. Every institution has Lecturers, Assistant professor, and Professor; and all are expected to do research. In India, higher education is in the affiliated colleges which are 22000 in number. They have no Professor; not even Assistant professors necessarily. Ninety percent (90%) of our undergraduate students and 66% of our postgraduate students; and 84% of our faculty in higher education are in the affiliated colleges. There is no research in the affiliated colleges; this means that in the field of higher education 84% of faculty members do not do research. They are not expected to do research and only 16% of the faculty in higher education is expected to do research in the country. How can university research prosper with such grossly inadequate numbers not engaging in research, in comparison with the entire higher education faculty being expected to do research in advanced countries? The India higher education sector should spend more money on research and motivate the faculty of higher education working in affiliated colleges. (Matliwala)

In India, as well as increasing demand for higher education generally, there is a growing demand for foreign degrees and an increase in the provision of private higher education (Bhushan 2005). As the public higher education system has been unable to provide enough places for the demand, there has been a growth in a range of private higher education providers. "A significant number of 'reputed' private institutions were accorded the status of 'deemed universities', thereby permitting them to confer degrees, and private providers became important actors in widening access to higher learning and training in India" (Bhushan 2006).

The Indian government is planning to establish new universities and colleges, but these will not be enough to meet the demand. The Indian 11th Five Year plan requires an additional seven million new places in higher education by 2012 and a total of 16 million additional places in higher education by 2020. (Kemp 2007). There are already many private higher education providers in India, such as Manipal University, NIIT, Birla, the Jaypee Institute, the Vedanta University, and many wealthy business groups in India are investing in education – some with a background in education, others with business backgrounds in other sectors (such as Birla) (Kemp 2007). The higher education sector in India had 9.84 million enrolments in 2006, and with a burgeoning middle class of approximately 200 million people, there is a strong demand for higher education places which the public education system cannot meet (Stinson 2007)

Education at the Undergraduate level

 Universities should give more attention to undergraduate teaching. Within 10 years at least 50% of university age learners can receive higher education. Links should be developed between school education and higher education. In many universities teaching at the undergraduate level is not given full attention. This trend harms university education and must be checked. Most of the teaching in universities and colleges do not keep the potentialities of the learner in view. University teachers often keep only the prescribed content in focus and are unmindful of the learner's abilities to assimilate. University teachers should have to be oriented towards this through the faculty improvement programme.(Misra,1998).

India has significant advantages in the 21st-century knowledge race. It has a large higher education sector, the third-largest in the world (in student numbers) after China and the United States. It uses English as a primary language of higher education and research. But there are a small number of high-quality institutions, departments, and centers that can form the basis of the quality sector in higher education. The fact that the States, rather than the Central Government, exercise major responsibility for higher education creates a rather cumbersome structure, but the system allows for a variety of policies and approaches.

Annual Status Of Education Board Report

(**ASER flags poor learning outcomes in schools**).Only 16% of children in class 1 in 26 surveyed rural districts can read the text at the prescribed level, while 40% cannot even recognize letters, according to the (ASER) 2019, released by NGO Pratham on 15 January,2020.

37,000 children surveyed ASER surveyors visited almost 37,000 children between 4 and 8 years in 26 rural districts across 24 states. The survey shows that among class 1 who could correctly do none or only one of the tasks requiring cognitive skills, about 14% could read words, while 19% could do single-digit addition. However, of those children who could correctly do all three cognitive tasks, 52% could read words, 63% could solve the addition problem.Global research shows 90%of brain growth occurs by age 5, meaning that the quality of early childhood education has a crucial impact on the development and long-term schooling of the child.

Private School Ahead

Of six-years-old in class 1, 41.5% of those in private schools could read words in comparison to only 19% from government schools. Similarly, 28% of those in government schools could do simple addition as against 47% in private schools. This gap is further exacerbated by a gender divide: only 39% of girls aged 6-8 are enrolled in private schools in comparison to almost 48% of boys.

Physical Education and sports in Higher education

High school students retain a higher level of knowledge related to overall health that helps them make an educated decision regarding their own health, safety, and well-being. It is important to develop:

- Fitness
- Builds Self Confidence
- Develop Motor Skills
- Health and Nutrition
- Relieve Stress

Conclusion

"This suggest s that focusing on play-based activities that build memory, reasoning and problem-solving abilities is more productive than nearly focus on content knowledge.'' The needs of higher education cannot be met by the Government alone. It needs the participation of the Government, the private providers and perhaps selectively participation of foreign universities. We have to free ourselves from the mindset and take a realistic attitude, taking into consideration the fact that a major revolution is taking place in higher education in the world. We have to take certain steps for the improvement of our higher education system.

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Assessment of Pregnant Women Suffering from Thyroid Dysfunction to ensure Improved Quality of Life

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Abstract

The present investigation entitled was conducted inGovernment Gandhi Nagar Hospital, Jammu City, Jammu and Kashmir. The present study was conducted on 200 pregnant women. Maximum number of the pregnant women were suffering from hypothyroidism (75%) whereas, pregnant women were suffering from hyperthyroidism (11%) and pregnant women were normal (14%). Respondent who were in third trimester where more chances of suffering hypothyroidism (41.5%). Maximum number of the respondent preference to have vegetarian (42.5%) followed by Eggetarian (35.5%) and non- vegetarian (22%). Maximum respondents were taken time interval in between meal of two hours (52%). Maximum respondent does not have effect meal pattern after pregnancy (56.5%). Maximum number of the respondent do not have idea of consulting dietician (97%). 92% of the respondent have powder salt and 2% have crystal salt. Maximum number was not aware of thyroid dysfunction (94%). Maximum number of the respondent take preventive measured in form of medication (82.5%). Biochemical test for maximum respondent showed most of them anemic, hyperthyroidism and T3 and T4 high more than normal level.

Key words: *Hypothyroidism, Hyperthyroidism, TSH, T3, T4*

Introduction

The endocrine system is a chain of glands that generate and produces hormones that the body utilizes for a variety ofoperations. Hormones are secreted by glands and forwarded into the circulatory system to a range of tissues in the body. Diseases can be a major outcome, which can have an influence on many facets of life, if the glands don't secrete the right number of hormones. Thyroid hormones aid all the body organs to work efficiently. They have a power over how your body utilizes food for energy. Thyroid hormones have an effect on the metabolism rate, which signifies how quick or slow the brain, heart, muscles, liver, and other parts of the body work(Barclay, 2018).Thyroid disorders are conditions that have an effect on the thyroid gland, which is located in the front of the neck, and resembles butterfly in shape. The major functions of thyroid gland are to control various metabolic processes all through the body. Several types of thyroid disorders influence either its structure or function (Brady, 2015).The thyroid gland is situated beneath the Adam's apple swathed around the trachea (windpipe). Isthmus is a slender area of tissue in the gland's middle part, which connects the two thyroid lobes on both sides. Thyroxin, also called as T4,

is the key hormone secreted by the gland. A small fraction of the T4 is discharged from the gland and is transformed into triiodothyronine (T3), after the delivery via the bloodstream to the body's tissues. T3 and T4 have a power over our body's metabolism. T3 and T4 are not equivalent in potency. T3 is the more active hormone of the two(Sargis, 2017).The function of the thyroid gland is synchronized by a feedback mechanism linking the brain. When thyroid hormone levels are down, the hypothalamus in the brain secrete a hormone known as thyrotropin releasing hormone (TRH) that causes the pituitary gland (located at the base of the brain) to release thyroid invigorating hormone (TSH). TSH stimulates the thyroid gland to discharge more T4.The thyroid gland secretestriiodothyronine (T3) and thyroxin (T4). The core hormone is thyroxin, also called T4(Brady, 2015).Thyroxin (T4) is produced by the thyroid gland underneath regulation from the hypothalamus and pituitary gland. The reaction loop signals to the hypothalamus in to secrete thyrotropin-releasing hormone, which then stimulates the pituitary gland to secrete the thyroid stimulating hormone (Brady, 2015).T3 is a second thyroid hormone that is produced by the thyroid gland, but also in further tissues during deionization (enzymatic conversion) of T4. T3 helps preserve muscle control, brain function and growth heart and digestive functions. It also plays a role in the body's metabolic rate and the maintenance of bone health (Brady, 2015).

Material and Methods

This delineates information pertaining to the research design and mythological steps used for the present investigation. The research procedures have been distinctly described under the following heads:

1. Research design

Research design is pure and simple framework of plans for a study that guides data collection and analysis; it is conceptual structure within which research is conducted.

2. Locale of the study

The present study was conducted on 200 patients, provisionally diagnosed for thyroid during pregnancy visited Government Gandhi Nagar Hospital, Jammu, Jammu and Kashmir from December 2018 to February 2019.

3. Research instrument

For the present study, the data was collected by questionnaire cum interview method comprising of mainly structured and open-ended questions. The questions were kept simple, unambiguous and suitable to children understanding capacity.

Parameters of the questionnaire:

- Dietary pattern of the pregnant ladies suffering from thyroid in Jammu.
- Nutritional awareness of the pregnant ladies suffering from thyroid, visiting Government Gandhi Nagar Hospital, Jammu, Jammu and Kashmir.
- Biochemical profile of the pregnant ladies suffering from thyroid, visiting Government Gandhi Nagar Hospital, Jammu, Jammu and Kashmir.

4. Biochemical parameters

Several biochemical parameters including hemoglobin level, TSH level, T_4 and T_3 level, and thyroid antibody test.

5. Nutritional status

Following parameters were included in the nutritional status for pregnant women suffering from thyroid in Jammu city:food habits, dietary pattern and food and nutrient intake.The food intake was assessed

by 24hour dietary recall method. In this recall method, dietary data is obtained from the respondent through an oral questionnaire of diet survey, using a set of 'standardized cups' suited to local condition. Dietary intake of respondentswere calculated using software called Diet Cal (Version 8.0), a tool for dietary assessment and planning.

6. Statistical analysis of data

Statistics is used to analyze the response with simple frequencies. Percentages and chi square test were used to interpret the result using Statistical Package for Social Sciences (SPSS) version 22.

Results and Discussion

This deals with the results and their interpretation in context to the objectives framed for the present investigation. Results obtained during the course of investigation have been systematically presented through classified and supportive material enabling extrapolation of comprehensive outcomes. In context of the study objectives, the results have been presented under the following heads:

1. Dietary Patterns

Table 1. Dietary preference of the respondents

Dietary Preference	Frequency	Percentage
Vegetarian	85	42.5%
Eggetarian	71	35.5%
Non-vegetarian	44	22%
Total	200	100%

Table 1 distributed on the basis of dietary preference. It revealed that majority of pregnant women were vegetarian with 42.5 percent (n=85) whereas 35.5 percent (n=71) of pregnant women were Eggetarian and rest 22 percent (n=44) women were non-vegetarian.

Table 2. Meal time intervals of the respondents

Time Intervals	Frequency	Percentage
After 1 hour	49	24.5%
After 2 hours	104	52.0%
After 3 hours	43	21.5%
More than 3 hours	04	2.00%
Total	200	100%

Table 2 presented distribution of the sample on the basis of meal-time intervals52.0 percent (n=104) of pregnant women were found taking meals after 2 hours, whereas 24.5 percent (n=49) of pregnant women were found taking meals after 1 hour, while 21.5 percent (n=43) of pregnant women were found taking meals after 3 hours and only 2 percent (n=4) of pregnant women were found taking meals more than 3 hours.

Table 3. Meal patterns affecting pregnancy of the respondents

Meal Patterns Affecting Pregnancy	Frequency	Percentage
Yes	87	43.5%
No	113	56.5%
Total	200	100%

Table 3 presented distribution of the sample on the basis meal patterns affecting pregnancy. It has been observed 56.5 percent (n=113) of pregnant women stated changes in their meal pattern affecting their pregnancy whereas, 43.5 percent (n=87) of pregnant women stated no change in their meal pattern affecting their pregnancy.

Table 4. Diet consultation of the respondents

Diet Consultation	Frequency	Percentage
Yes	6	3%
No	194	97%
Total	200	100%

Information regarding diet consultation is given in Table 4 revealed majority of the sample pregnant women 97 percent (n=194) did not consult dietitian for their diet while only 3 percent (n=6) pregnant women consulted dietitian fir their diet.

Table 5. Salt consumption by the respondents

Salt Consumption	Frequency	Percentage
Powdered	184	92%
Crystalline	16	8%
Total	200	100%

Table 5 revealed that the distribution of sample on the basis of salt consumption. Majority of the pregnant women 92 percent (n=184) consumed powdered salt while just 8 percent (n=16) of pregnant women consumed crystalline salt.

Table 6. Mean nutrient intake of the respondents compared with RDA

Nutrient	No.	Average Actual Intake	Standard Deviation	RDA	Mean Difference	t-value	p-value
Energy (Kcal)	200	1490.16	483.6	2500	-1009.844	-29.531	.631
Protein (gms)	200	44.3	14.737	77.9	-33.571	-32.217	.001
Fat (gms)	200	30.34	17.384	30	0.343	0.279	.469
Carbohydrates (gms)	200	229.81	76.748	375	-145.194	-26.754	.000
Iron (mg)	200	9.84	4.046	25	-15.159	-52.987	.002

Table 6 showed that average intake of energy, protein, fat, carbohydrate and iron values were 1490.16Kcal, 44.3gms, 30.34gms, 229.81gms and 9.84mg.The respondents reported low consumption of energy, protein, carbohydrate and iron when compared to RDA.Fat was more in consumption (30.34gms) when compared to fat (30gms) in RDA.

2. Nutritional Awareness

Table 6. Thyroid dysfunction awareness among respondents

Awareness	Frequency	Percentage
Yes	12	6%
No	188	94%
Total	200	100%

In Table 6, the sample is distributed on the basis of thyroid dysfunction awareness which showed that majority of pregnant women 94 percent (n=188) were not aware of thyroid dysfunction only few 6 percent (n=12) of pregnant women were aware of thyroid dysfunction.

Table 7. Preventive measures taken up by the respondents

Preventive measures	Frequency	Percentage
Regular check-up	25	12.5%
Medication	165	82.5%
Regulation of diet	10	5%
Total	200	100%

Table 7 revealed that 12.5 percent (n=25) have gone for medical check-up while 82.5 percent (n=165) of pregnant women were on medication and only 5 percent (n=10) of pregnant women were regulating their diet.

3. Biochemical Profile

Table 8. Hemoglobin test of the respondents

Type of test	Presumptive Diagnosis	Levels	Frequency	Percentage
Hemoglobin	Normal	Above 11	25	12.5%
	Mild anemia	10-10.9	61	30.5%
	Moderate anemia	7-9.9	107	53.5%
	Severe anemia	Less than 7	7	3.5%
Total			200	100%

Table 8 presented the distribution of sample on the basis of hemoglobin test. 12.5 percent (n=25) of the pregnant women were normal, 30.5 percent (n=61) of the pregnant women had mild anemia where as 53.5 percent (n=107) of the pregnant women had moderate anemia while only 3.5 percent (n=7) of the pregnant women had severe anemia.

Table 9. Thyroid-stimulating hormone test of the respondents

Type of Test	Presumptive diagnosis	Levels	Frequency	Percentage
TSH	Hypothyroidism	More than 4.23	150	75%
	Hyperthyroidism	Less than 0.30	22	11%
	Normal	0.30-4.23	28	14%
Total			200	100%

Table 9 revealed the distribution of sample on the basis of thyroid-stimulating test. Majority of the pregnant women 70 percent (n=150) was suffering from hypothyroidism, where as 11 percent (n=22) of the pregnant women was suffering from hyperthyroidism, while 14 percent (n=28) were normal.

Table 10. Triiodothyronine (T3) hormone test of the respondents

Type of Test	Presumptive Diagnosis	Levels	Frequency	Percentage
T3	Normal	0.60-1.81	100	50%
		More than 1.81	101	50.5%
Total			200	100%

Table 10 presented the distribution of sample on the basis of triiodothyronine hormone test.50 percent (n=100) of the pregnant women were normal while 50.5 percent (n=101) were suffering from triiodothyronine.

Table 11. Thyroxine (T4) hormone test of the respondents

Type of Test	Presumptive Diagnosis	Levels	Frequency	Percentage
T4	Normal	4.6-12	70	35%
		More than 12	70	35%
		Less than 4.6	60	30%
Total			200	100%

Table 11 demonstrated the distribution of sample on the basis of thyroxine hormone test. 35 percent (n=70) of the pregnant women were normal where as 35 percent (n=70) were suffering from thyroxine, while 30 percent (n=60) were suffering from thyroxine.

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Women's Empowerment and Vitamin D Deficiency: Emerging Role, Causes and Its Management

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Abstract

Promoting vitamin D health awareness through higher education, if replicated across populations, could lead to positive health outcomes globally. Vitamin D is commonly known as "sunshine" vitamin. Vitamin D is a part of the "Calcium-Vitamin D-Parathyroid hormone" endocrine axis (Harinarayan and Joshi., 2009). It is crucial for calcium metabolism and its homeostasis. Adequate calcium intake along with vitamin D is necessary to maintain the peak bone mass achieved by an individual. Women in the underprivileged sections, both in urban and rural India, are battling inadequate resources, multiparity, imposed customs of clothing, and social vulnerability of the fairer sex which coupled with the urban environmental decay continues to pose threat of Vit D deficiency. Special efforts on the medical and social fronts are necessary to combat this preventable epidemic and empower women. Vitamin D is an essential factor, not only for homeostasis of calcium and phosphorous, but also for cell proliferation, differentiation and apoptosis, immune and hormonal regulation, as well as other body processes. Vitamin D is a fat soluble steroid vitamin and its synthesis in the body is dependent on multiple factors like latitude, atmospheric pollution, clothing, skin pigmentation and duration and time of exposure to sunlight. The role of Vit D in osteoporosis and muscle weakness is undisputable. There is a recent trend to give a higher dose of Vit D to prevent the osteoporotic fracture.

Introduction

Women play a crucial role in the alteration of intra-household dynamics that result in improved health and nutrition outcomes especially for children. This is driven, globally, by a change in their control of income, decision-making power, access to health services and nutrition education while recognizing constraints of time and resources faced by them (World Bank, 2007). Vitamin D deficiency is a worldwide epidemic and yet, it is a problem that is largely unknown by majority of population (Holick and Chen., 2008). Widespread prevalence in all age groups including toddlers, school children, men, women, elderly, pregnant women, and their neonates in both rural and urban areas has been documented (Holick, 2007). Young adults are also potentially at high-risk for vitamin D deficiency. Research has now shown Vit D's indisputable role in both inherent and adaptive immunity. Despite the close link of vitamin D with human health, vitamin D inadequacy is not widely recognized as a problem by physicians and patients. Greater awareness of the problem of a high prevalence of vitamin D inadequacy is required among researchers, clinicians, and patients. Attitude of women is optimal. Women with a positive attitude

toward osteoporosis preventive behaviors such as regular physical activity and fitness, calcium and vitamin D intake, low coffee consumption are less likely to develop osteoporosis.

The principle source of Vitamin D is from our own skin. The term "vitamin D" refers to compounds vitamin D_3 (cholecalciferol) or vitamin D_2 (ergocalciferol). A chemical compound called 7- dehydrochelosterol, naturally present in the superficial layers of skin, is converted, on exposure to ultra violet B(UV-B) radiation, to a compound called pre-vitamin D, which spontaneously changes into cholecalciferol (Vitamin D3). In a tropical country like India, where sunlight exposure is abundant, vitamin D deficiency seems unlikely however, it is easily preventable. Vitamin D deficiency causes low bone mass, muscle weakness and therefore increased risk of fracture. Vitamin D deficiency and low calcium causes long standing secondary hyperparathyroidism leading to increased bone turnover causing osteoporotic fractures (Reginster ., 2005; Riggs., 2003). It is essential to interpret bone mineral density (BMD) with Vitamin D levels. Tuberculosis is associated with lower Vit D levels. It has been reported that increased vitamin D levels can improve muscle performance and thus reduce the incidence of falls. In a 5-month randomized controlled trial, elderly people in a nursing home receiving 800 IU of vitamin D2 plus calcium daily exhibited a 72 % reduction in the risk of falls as compared with the placebo group (Broe et al., 2007). Thus, vitamin D does reduce muscle weakness.

Reduced blood pressure has been found in people taking oral supplementation of vitamin D. Skin exposure to UVB, which is the major source of vitamin D formation, has been linked with lower blood pressure (Kunes et al., 1991; Woodhouse et al., 1993;. Krause et al., 1898) Vitamin D is one of the most potent hormones for regulating cell growth. The protective relationship between sufficient vitamin D status and a lower risk of cancer has been found in many studies. It has been reported that breast and colorectal cancer can be reduced by 50 % with the concentration of 25-hydroxyvitamin D being >32 ng/mL (Lappe et al., 2007; Dembrow et al., 2007). The higher the Vit D level, the lower the risk of cancer. Vitamin D acts as an immunosuppressant in rheumatoid arthritis as well. Small quantity of vitamin D is also available in foods, but unlike the other vitamins, most foods do not contain appreciable amount of this micronutrients. Vitamin D_3 is found in animal food sources e.g., fatty fish (e.g., salmon, mackerel and tuna) cod liver oil, milk, egg yolks, *etc* and in vegetal sources like sun-exposed yeast and mushrooms, fortified dairy and grain products. Notably, most dietary sources are not sufficiently rich in their vitamin D content.

Management

- It is very important that the ICMR revise the recommended daily allowance to include daily recommendations for Vitamin D levels. The current recommendations of taking 1 to 1.5 gm of dietary calcium and 2000 IU of vitamin D per day in the diet should be adhered to avoid vitamin D deficiency in the Indian population.

- Milk intake, regular intake of atleast 500 ml milk/day is recommended particularly for vegetarians.

- Ideal sun exposure through daily physical activity of half an hour in sun should be made compulsory part of school curriculum in India.

- Thirty minutes of exposure of the skin over the arms and face to sunlight, preferably between 10 am to 2 pm (as maximum ultraviolet B rays are transmitted during this time) daily is adequate to avoid vitamin D deficiency. Sunscreens should be used very judiciously.

- Vitamin D supplementation should be made available at affordable rates that are easy to consume and widely available to the general public. Prophylaxis programme could be planned for vitamin D supplementation especially for vulnerable groups such as infants, toddlers, pregnant and lactating women and elderly.

- Public health policies should be devised for fortification of foods such as oil, milk, infant cereals, and breakfast cereals with vitamin D.

- Educational programs need to be planned to increase public awareness regarding vitamin D deficiency, causes, long term consequences and treatment.

- Another way to prevent osteoporosis is self-empowerment. A self-empowered person is able to act consciously and selectively. A set of individual and social factors are involved in self-empowerment (Rafieifar, 2005). Self-empowerment as the heart of health promotion is a dynamic and inclusive process by which an individual has more control on their decisions, lifestyles and activities effective on their health. Therefore, it is vital to promote self-empowerment among women to encounter vitamin d deficiency.

Conclusion

Attitude, social skills and self-efficacy as components of self-empowerment are optimal for women. However, researches show that a large number of females do not have knowledge about vitamin D and need training in this field. Therefore, women all over should be introduced to proper nutrition and preventive behaviors and thus promotion of capabilities and skills that can play an important role in reducing vitamin D deficiency and its adverse social and economic consequences. Health-related behaviors at personal and professional level, effective educational campaigns targeted to specific populations would increase awareness about adequate intake of vitamin D, thereby empowering women.

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Impact of Higher Education to Control Hyperlipidemia: A Risk Factor for Cardiovascular Disease

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Abstract

Hyperlipidemia is defined as elevations of fasting total cholesterol concentration which may or may not be associated with elevated TG concentration. Cholesterol is a waxy substance made by the body and also comes from the diet. High cholesterol in the body is also commonly known as hyperlipidemia. It is a common problem that may deposit extra fats in the blood. Hyperlipidemia is the leading risk factor for cardiovascular diseases. Cholesterol and triglycerides together make it difficult for blood to pass by narrowing the blood vessels. This review basically focuses on the causes, types, diagnosis, symptoms, and treatment of hyperlipidemia. It may be treated by providing higher education towards the prevention of disease and changing lifestyle, eating healthy food, doing exercise but several medications are also available in the market.

Keywords: *Hyperlipidemia, Lipoprotein, Screening, Cardiovascular disease, Cholesterol*

Introduction

Hyperlipidemia is a medical condition characterized by an increase in one or more of the plasma lipids, including triglycerides, cholesterol, cholesterol esters, phospholipids and or plasma lipoproteins including very-low-density lipoprotein and low-density lipoprotein along with reduced high-density lipoprotein levels. This elevation of plasma lipids is among the leading risk factors associated with cardiovascular diseases **(Ghassan F. Shattat, 2015; Robert H. Nelson, 2014).** For most primary care providers, hyperlipidemia is defined as elevations of fasting total cholesterol concentration which may or may not be associated with elevated TG concentration. However, lipids are not soluble in plasma but are instead transported in particles known as lipoproteins. Therefore, classifications of hyperlipidemia are also based on abnormalities of lipoproteins:

Classes of Apolipoproteins

- Chylomicrons – Triglyceride rich carrier of dietary fats
- Very Low-Density Lipoprotein (VLDL) – Triglyceride rich carrier of hepatic synthesized triglycerides (TG)
- Intermediate and Low-Density Lipoprotein (IDL & LDL) – Cholesterol rich remnant particles derived from lipolysis of triglycerides in VLDL
- High-Density Lipoprotein (HDL) – Cholesterol rich particle that transports cholesterol to the liver for disposal or recycling

Classification of hyperlipidemias as defined by the NCEP (National Cholesterol Education Panel). All concentrations are expressed as mg/dL :

LDL Cholesterol	
<100	Optimal
100 – 129	Near or above optimal
130 – 159	Borderline high
160 – 189	High
≥ 190	Very high
Total Cholesterol	
<200	Desirable
200 – 239	Borderline high
≥ 240	High
HDL Cholesterol*	
<40	Low
≥ 60	High
Triglycerides	
<150	Normal
150 – 199	Borderline high
200 – 499	High
≥ 500	Very high

Significance of Hyperlipidemia

Health care providers are concerned about hyperlipidemia because of the well-established association between lipid concentrations and the risk of CVD, the leading cause of death in the United States. A landmark study that helped establish that therapeutic intervention to lower cholesterol levels result in a reduced risk of cardiovascular morbidity or mortality was the Lipid Research Clinics Coronary Primary Prevention Trial, which was published in two parts (each using a different statistical analysis) in 1984. However, numerous other trials, both prior to and after 1984, also contributed to the evidence of a CVD-hyperlipidemia link. The scientific and medical communities took several decades to agree that this relationship truly exists.

Diagnosis

Most cases of hyperlipidemia are found because a lipid panel screen is done as a part of a routine health care evaluation or because plasma lipids are checked after a cardiovascular event. Screening refers to testing lipids in people who are without symptoms or associated disease. Any person who is diagnosed with diseases related to hyperlipidemia (e.g. hypothyroidism, diabetes, renal insufficiency, etc.) should have a lipid evaluation as a part of the diagnostic workup. This also holds true for anyone who presents with evidence of CVD (e.g. angina, myocardial infarction, onset of claudication, discovery of a vessel bruit, etc.) **(Samantha Karr, 2017)** Cardiovascular disease (CVD) is the leading cause of death among adults in the United States, and people with hyperlipidemia are at roughly twice the risk of developing CVD as compared to those with normal total cholesterol levels.1 Patients with familial hypercholesterolemia (FH) have an even greater risk of developing CVD at an earlier age; therefore, early detection and treatment are imperative to reduce cardiovascular events and premature death. Statins are the mainstay treatment for hyperlipidemia; however, the limitations of statins include treatment resistance, intolerance due to adverse events, and a lack of adherence which contribute to poor outcomes.

Discussion

Bela Shah *et al,* 2011studied the risk factors related to cardiovascular disease in India. It was found that there was a rise in non-communicable diseases (NCDs) burden, which is causing increasing morbidity and premature mortality in developing countries. In 1990, cardiovascular diseases (CVD) accounted for 63 percent of all deaths and India contributed to 17 percent to worldwide mortality. These surveys are limited by their generalisability to other parts of the country, and more was required to roll out of an action plan. There was a lack of an organized national system for monitoring these risk factors over time so as to inform policy and programme for appropriate interventions. The Indian Council of Medical Research (ICMR) leveraged its research on NCD risk factor surveillance to the development of the national plan under the Integrated Disease Surveillance Project (IDSP) which will obtain State-based prevalence of selected risk factors. This review provides the scenario of CVD in India and the need for a surveillance system.

Hisako Izumi *et al,* 2014conducted a hyperlipidemia prevention intervention for behavior change to evaluate changes in health behavior and to investigate the effectiveness of these changes, w.r.t early prevention and improvement of the disease. Subjects were middle-aged individuals aged 30 - 49, suffering from serum lipid abnormalities. An intervention designed to affect behavior change was implemented for 3 weeks in 11 employees (nine males, two females) at five workplaces. Intervention mainly consisted of improving self-efficacy. Subjects filled questionnaires and recorded their physical activity using accelerometers and dietary intake photographically. Data were analyzed using descriptive statistics; therefore, pre- and post-intervention data were compared. Health behavior scores showed a modification of behavior in a desirable direction after the intervention compared with those before the intervention. No significant difference in self-efficacy before and after the intervention was observed. However, the subscale for diet was significantly higher after the intervention compared with that before the intervention. Steps, total calories, and activity calories were increased in the second and third weeks compared with those in the first week. Three weeks of intervention resulted in health behavior change in a desirable direction. We infer that intervention in the form of self-monitoring using accelerometers that make physical activity visible was effective in leading to behavior change.

(Dabei Fan *et al,* 2018)The study revealed the effect of hyperlipidemia on the incidence of cardio-cerebrovascular diseases in patients with type 2 diabetes. The study was conducted on 395 patients suffering from type 2 diabetes from January 2012 to January 2016. The incidence of cardio-cerebrovascular diseases between diabetes combined with hyperlipidemia group (195 patients) and diabetes group (200 patients) was made a comparison. In this research, the incidence of hyperlipidemia was 44.6%, and the incidence of diabetes combined with hyperlipidemia was 49.4%. Among them, the incidence of hyperlipidemia in patients with all-cause death, cardio-cerebrovascular events death, myocardial infarction, cerebral infarction, cerebral hemorrhage, and total cardio-cerebrovascular events were 67.5%, 73.2%, 69.8%, 70.4%, 65.8%, and 61.3%, respectively.

Niharika Verma, 2017studied that cardiovascular diseases, especially coronary heart disease (CHD), are epidemic in India. According to American Heart Association, the Centres for Disease Control and Prevention, the National Institutes of Health and other government sources, cardiovascular disease is the leading global cause of death, accounting for more than 17.3 million deaths per year, a number that is expected to grow to more than 23.6 million by 2030. India has seen a rapid transition in its heart disease burden over the past couple of decades. Of the 30 million heart patients in India, 14 million reside in urban areas and 16 million in rural areas. If the current trend continues, by the year 2020, the burden of atherothrombotic cardiovascular diseases in India will surpass that of any other country in the world.

The Registrar General of India reported that CHD led to 17% of total deaths and 26% of adult deaths in 2001-2003, which increased to 23% of total and 32% of adult deaths in 2010-2013. The global increase in the prevalence of hyperlipidemia is due to unhealthy eating habits, obesity, and physical inactivity.

Conclusion

To summarize, there is a solid link between elevated cholesterol (especially LDL-C) and CVD. It has been conclusively shown and become accepted practice to lower LDL-C in patients considered intermediate to high risk for CVD with a combination of therapeutic lifestyle change and medications. Hypercholesterolemia or hyperlipidemia should be cured as its elevated level may lead to several harmful diseases like atherosclerosis, cardiovascular, high blood pressure and many other severe problems that seriously affect the human body. Providing higher education among people about hyperlipidemia can help spread awareness and could reduce the prevalence of the disease. Recent changes to treatment recommendations are providing greater guidance for the management of hyperlipidemia, which includes a treat-to-target approach as well as using therapies based on the expected response. First-line drug therapy should be a statin.

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Role of Higher Education in Betterment of Dalit Women

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Abstract

The paper aims to discuss how Dalit women are the Dalit of the Dalit in Indian society, the thrice oppressed victims of centuries of social, political, economic, cultural and religious exploitation. When the Dalit women endeavor to rise up in the social scale, they are too often brutally crushed up by the upper castes and sometimes by the state machinery.

During recent years the problem of the woman has received considerable attention. Besides the civic rights violation and sexual exploitation, Dalit women also suffer from political, economic and educational rights. Human rights violation of the Dalit women has a close interconnection between the status of women in general and the Dalit women in particular as prescribed in the Hindu social order. The explanation for the different and discriminatory attitudes of high caste males towards Dalit women is also to be found in the social and religious system of Hindus. In the overall social framework of Hindu society, women are not supposed to be free and all the sources of material development are blocked. Dalit women have no right to education, no right to acquire religious knowledge, no right to acquire the property. In fact, in the overall social scheme of the Hindu system, the Dalit woman is located at the bottom.. The paper would discuss how through education women find out an image of herself and also discuss how Sustainable Livelihoods schemes become a platform for them to speak and how they emancipate in governing the oppressed society.

Keywords: *oppressed, discrimination, violation, state, emancipate.*

Introduction

During recent years the problem of the woman has received considerable attention. Besides the civic rights violation and sexual exploitation, Dalit women also suffer from political, economic and educational rights. Human rights violation of the Dalit women has a close interconnection between the status of women in general and the Dalit women in particular as prescribed in the Hindu social order. The explanation for the different and discriminatory attitudes of high caste males towards Dalit women is also to be found in the social and religious system of Hindus. In the overall social framework of Hindu society, women are not supposed to be free and all the sources of material development are blocked. Dalit women have no right to education, no right to acquire religious knowledge, no right to acquire the property. In fact, in the overall social scheme of the Hindu system, the Dalit woman is located at the bottom. In this regard, Massey rightly said: Both the Minorities and the commission have to work together, as also those non-governmental organizations (NGOs) who are working in this field. In fact, such NGOs can play a very constructive and effective role in this regard (Massey, 160).

The lack of education development is another important problem from which the Dalit women suffer. In 1991 the literacy rate among Dalit women was indeed quite low in the rural areas. In rural areas only 19.46 percent Dalit women were literate. By comparison, the rate for the general population was 30.62 percent. Similar disparities existed in 1991 for urban areas also. In fact in urban areas the literacy rate among dalit female is the lowest.

In Dalit women's writings, we see they are related to different periods of time and set in different levels of society. We see various facets of the dalit movement, their struggle for survival, the man and woman relationship, an existence crushed under the wheels of village life, the experience of humilation and atrocites an rebellion too.

Dalit women are thrice discriminated, treated as untouchables and as outcastes, due to their caste, face gender discrimination being women and finally economic impoverishment due to unequal wage disparity, with low or underpaid labour.The discrimination that Dalit women are subjected to is similar to racial discrimination, where the former is discriminated and treated as untouchable due to descent, for being born into a particular community, while, the latter face discrimination due to colour. The caste system declares Dalit women as 'impure' and therefore untouchable and hence socially excluded. This is a complete negation and violation of women's human rights.

During post-90s, as 'subaltern' becomes the catchword, both for the academia and politics, the women dalit autobiographies also begin to appear in great number and the upsurge is amply supported by the rise of subalternist historiographers. Christian activists like Gail Omvedt, Oliver Mendelson, and Eleanor Zelliot in particular emerge as critical spokespersons of the dalit cause. Even within the subaltern category of the dalit, a deeper subaltern category of dalit woman thus becomes the subject of self-presentation and representation both. Dalit woman autobiographers do not form a homogenous group for despite their small number they have distinct approaches to their subject position. While Bama, one of the earliest to write an autobiography among dalit women, takes a very radical stance against upper caste hegemony, the latter-day dalit woman autobiographers are not as much loud-mouthed. For this paper different autobiographies of an illiterate woman and literate women are chosen to understand the changing locus of dalit aesthetics on the whole.*In Prisons We Broke* is the first autobiography of a Dalit woman in Marathi. *JinaAmucha*, the original in Marathi, was published in The narrative is an expression of protest against the inhuman conditions of existence to which the Hindu caste system has subjected the Dalits for thousand of years. 1986. Not only it depicts the inner harsh realities of the Mahar community in Maharashtra but also graphically presents how brahmanically domination had turned the Mahars into slaves, forcing them to live in conditions worse than animals.

Baby Kamble recollects thoughts about her life in village, named, *Veergaon* in the Purander taluka in Pune district.She remembers how the Maharwadas were deprived of prosperous life:

Such was the condition of our people. We were just like animals, but without tails. We could be called human only because we had two legs instead of four. Otherwise there was no difference between us and the animals… We eat the leftovers without complaining and labored for others. The only difference, however, was that the beasts could eat a bellyful and they could stay in their master's courtyard. But our condition was far worse. Our place was in the garbage pits outside the village, where everyone threw away their waste. That was where we lived, in our poor huts, amidst all the filth! (Kamble, 49).

Baby Kamble demonstrates how the dalit woman was doubly exploited at the hands of caste and patriarchy domination. Like other dalit woman writers, Baby Kamble also made an attempt to destroy the myth that dalit patriarchy is democratic as reveals a hidden truth in the following paragraph:

The Plight of Dalit Woman is projected beyond endurance. Dalit woman had undergone worst form of exploitation and physical torture from Mahar men: They were not hesitated to cut off the tip of her nose

and breasts too! The life of the woman in the lower castes was thus shaped by fire of calamities. (100). We also see that in 1990s Dalit women started asking angry questions related to feminist movements, caste and patriarchy. They knew Ambedkar well and aware about theitr struggle. For instance in the introduction to *The Weaves of My Life,*Pandit talks about Pawar's rejection of the LaxamibaiTilak Award. Dalit women assert in later Marathi dalit autobiographies. Pawar focuses on her own life story in the context of Mahar community of Maharastra and their struggles during the post- phule- Ambedkariteperiod.In the last few lines Babasahed accorded an extremely important place in Kamble's life and her thought become creative about fighting against the devaluation of human beings:

Baba's words showed me the way. I decided to begin my struggle through my writing. I followed Baba's advice verbatim, to the best of my ability. She starts an ashram shala for orphans from the backward castes. (135).BabyKamble bring into the foreground the life of the mahar community in the pre-Ambedkar era and highlight bthe transformation that came with the emergence of Ambedkaritecounterpublics.

Awareness of women through media like newspapers, television and pamphlets will go a long way in the real empowerment of Dalit women. Unless Dalit women are made aware of the government sponsored schemes, meant for their wellbeing, this section of the society cannot reap the dividend of progress. Dalit women need to shed the fear in their minds and wage a relentless struggle for their rights. Dalit women need to strive for education despite all odds. Women empowered with education, can also put a stop to the evil practices like child marriage. Baba Saheb, BhimRaoAmbedkar, had said that education is an important weapon for Dalits, using which, women can demand the rights conferred upon them by the Indian Constitution. The challenges faced by Dalit women are different, more so because they are mostly concentrated in the rural areas. Their work is mostly related to agriculture, but they do not have much knowledge about various things, related to their development.

The remarkable element in Dalit women writings is while Dalit men hardly talk about Dalit patriarchy in their writings, Dalit women are quite frank in writing the nature of exploitation witin their communities and outside. They also describe how they are the direct victims of such a trivial order. They are the voice of the changing dalit identity. The discussion which has woven through selected narratives of dalit women has indicated that Dalit women have started raising their voices against patriarchal order. In the progressive writers writings Dalit women have invariably shown as the victims of lust of the higher caste men and never as rebels to fight against the exploitation perpetrated upon them. But now dalit women can fight back to guard their dignity and self respect. The growing number of women's writings today is a clear instance of how Dalits have been breaking down age-old barriers of silence.

By reading these narratives we can say that the autobiography incorporates twin issues: firstly, the oppression and exploitation of the Dalit by the upper class: secondly, the discrimination towards women in a patriarchal society. For thousands of years, Dalits have been kept deprived of power, property and position and have continued to endure injustice. The anguish of Dalit Literature is not that of an individual but of the entire society.The emergence of Dalit poems, Dalit stories a and personal narrative is a historic breakthrough because now dalits are using this opportunity to assert their identities through their writings and we can call this a rhetoric of transformation begins. The introduction of dalittestimonios as historical narratives of experience is a way of introducing the counter views on caste system. These narratives speaks across all borders and personal boundaries to ask for greater human awareness and senstivity, to ask for social change. To quote Gopal Guru: These writings perform a double function; they inflict an inferiritycompex in the minds of adversaries by resurrecting dalit triumphalism and bring out guilt in the minds of 'upper castes' by recording social wrongs done by ancestors. (qtd in Rege, 15).

Malaise in Higher Education:
Empirical Evaluation and Perspectives

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Having been associated with the higher education for the past 36 years, gives me courage and confidence enough to speak about the difficulties and malaise set in our system that should lend warning signals to the office bearers and authorities governing and guiding our colleges. My perspectives rest on the education imparted in the colleges of Chandigarh and Punjab based on my experience of teaching, serious interaction with the students and teachers as well as the worrying data as to the value of the degrees and job prospects revealed in the media and many emerging social and cultural trends manifesting the loss of hope among the present youth.

According to the recent reporting by India Today, unemployment rate in India has shown a spike and stands 45 years high as revealed by National Sample Survey Office NSSO for 2017-18. One of the biggest factors is the graduates produced by the Institutes of Higher Studies who are unfit to for the job markets. Another report by the same paper focuses on the unimaginable. Over 80% of engineers in India are unemployable as they lack the technological, cognitive and linguistic skills required by the employers. This data was revealed by Aspiring Minds, a global Job Skills Credentialing Agency in 2013.Another report by the same agency points out that "47% graduates not employable in any sector of knowledge economy" based on AMCAT, Computer Adaptive Tests (2013) conducted on a sample of more than 60000 graduation students in colleges across multiple states of India by the agency. The situation might be even worse in the current years keeping in mind the overall unemployment scenario in the country.

Without doubt, the vital objective of higher education is to prepare the youth for self sufficiency and economic independency. Sadly, our institutes are lacking in the proper emphasis on fulfilling their duty in this field. Every year we hand over the mark sheets and degrees to our students, organise convocations and other functions to boost up their morals and fill their minds with pleasant memories of our institute before they leave the college but without giving a serious thought to the authentic learning and skill grasping on the part of students which is going to become a launching pad for their journey towards growth and independence. The very parameter of an ideal institute is the effort it puts in making the students employable and not mere degree- holders.

Observations and Concerns:

On the basis of my personal experience of teaching English to the undergraduates and graduates for a pretty long time, I have arrived at the following points of concern:

1. About 80 percent or more of students admitted in the college have a very poor foundation of the English language. Their grasp of grammar forming the very basis of the language is so dismal that it seems they suffer a backlog of at least 7-8 years.

2. The same percentage of students can be seen lacking in the aptitude of organised and critical thinking so much so that they are unable to speak a few lines about the subjects they had been taught in the schools.

3. Their reading, listening and writing manners show an equal amount of apathy on the part of the institutes they had been studying in right from the primary level. Here I refer to a recent Annual Status of Education Report (ASER) 2019, released by an NGO Pratham, published in The Hindu, dated 15th Jan 2020 after a survey of 37,000 children between the age group of 4and 8 studying in class 1 in 36 rural districts of India that says that only 40% of these children could recognise letters, 41% two digit numbers and only 16% could read texts.

4. The most bothering part is the false hope carried by the admitted students backed by their high or reasonably good score in the subject in their previous classes. Some years back, a student in my first year BA class, who had got 90% marks in her senior secondary exam conducted by CBSE in the subject, did not know how to structure a few simple legible sentences in English. While evaluating the answer sheets of B Com first year students appearing in English Compulsory during the last mid semester exams, I was appalled by the level of their English. Most of them were high scorers in their 12th standard on the basis of which they were admitted to the college in the commerce stream. I would like to display a sample paper of one such student who scored 72% marks in the subject of English in her 12th class, in order to highlight the gravity of the problem. This student who attempted the paper did not deserve even 2% marks had I looked at her language skills only. May be something was wrong with the way this child had been assessed by her school and that she had been fed with a false idea about her level of intelligence and learning..

5. In giving false hope or an inflated assessment regarding the abilities of students, even our colleges are not lagging behind. A student with a poor sense of the basics, as mentioned in an earlier point, somehow gets elevated to the higher classes in our institutes of higher learning thanks to the either the lenient marking or the degree of the cramming. Her plight is gauged by the fact that when she reaches her B A 3, she is not even equipped to write a simple grammatically correct composition piece as an application to the principal for a specific purpose like the condonation of lectures. Her spoken English due to lack of emphasis on the pronunciation and speaking in the class rooms is equally worrying. Many students are unable to read out from the texts prescribed in their syllabus.

6. The majority of students are lacking badly in the employment skills as communication; cognition; domain knowledge; reasoning and analysis; critical thinking as well as sufficient computer knowledge that make them ill prepared to land up in jobs after stepping out of college.

7. Most students suffer from the deficit of motivation and passion about learning and what they want to make of their lives in terms of the productivity and fulfilment.

Genesis of the Problem

1. Gaps in the quality of education and learning skills at the primary and secondary levels of schooling.

2. Emphasis on cramming or rote learning both in the schools and colleges for which our examination systems can be held as the biggest culprits. Our systems work toward making the education marks oriented rather than mind opening and means to become independent.

3. Related to the earlier point is the predictability of the questions set in the question papers for the exams whether mid semester or final university ones which mars the curiosity of the students to think beyond certain points and develop originality of approach. Questions are picked from the already circulated texts and help books with model answers. Such key books become handy to the students who do not wish to toil on reading the texts books, carefully selected by the University for the betterment of the students.

4. Since the evaluation is subjective, in most cases, lack of common standards of giving marks worked on by the evaluators before commencing the job.

5. Lack of motivation in some teachers in making the class room teaching interesting and enriching.

6. Lesser staff in the departments teaching and non teaching so that the burden of lectures fall on the existing faculty who in turn may not do justice to the requirement as per university rules.

7. Underpaid staff in the colleges. The problem is more glaring in the private institutes where the unemployment without, makes even the most qualified teachers bow before the writ of the management or the authorities to hold on to whatever is available.

8. Undue interference of the authorities in the governance of the institute at times scatters away the energy and capability of the head and the staff so that they are unable to focus on what is best for their students.

9. Hyper consciousness about the agencies of rating of the institutes such as NAAC and NIRF on the part of the authorities and do or die situation in transferring the data that might score the points as though education institutes are the goods markets which have to establish their USP's in comparison with the other institutes to survive and attract the best or in many cases maximum students.

Measures and Cure

Measures to ensure the qualitative and quantitative improvements lie in the right focus on the spirit rather than the edifice. As far as the class room teaching goes, the need to go beyond the prescribed syllabus on the part of teachers; encouraging questions from the students; emphasis on the importance of learning in the real life through application of concepts; being ready to learn and unlearn through interaction with the students; avoiding the monologic class room culture and teaching with lot of empathy for the learners. Well preparedness of the lessons delivered in the effective communication is other means to ameliorate the classroom environment. Training and placement cell in the colleges should be encouraged to reach out to all the students right from the first year only, to work towards bridging the gap between institutes and the employers. Counselling cells are a must in each institute in the wake of the present socio economic and psychological complexities. An institute must organise seminars and workshops on building the life skills and other domain knowledges for the students for the healthy outcomes, not merely for data collection and photo clips by emptying the classrooms. Active debating, theatre and cultural societies run solely by the students must be patronised and encouraged as the creative thinkers and the dynamic leaders of the future will be churned out of such workshops only. This is the high time we stem the apathy and neglect set in our institutes of higher learning so that we produce the best and capable minds as our nation's contribution to the society at large.

State of Higher Education in India: Issues and Challenges

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Abstract

Higher education is designed to broaden an individual's knowledge and experience. Higher education can lead to many benefits, including a prosperous career and financial security. In the 21st century, education plays an even more significant role in other aspects of your life. Attaining a higher education can increase your opportunities and improve your overall quality of life.Though higher education in India has come a long way since independence, it is on a difficult stride and indeed in crisis.Several bottlenecks persist in the education sector in India which impede its overall growth and efficiency like shortage of faculty, privatization and commercialization of education making it unaffordable, lack of practical exposure to students, etc. Further, the skill development gap between what is demanded by industry and output supplied by higher educational institutions is widening. So, there is a need to focus on these aspects in the areas of Higher Education, where many kinds of Issues, Challenges, and Prospects have been noticed.

This paper aims to explore the state of higher education in India and to identify various issues, challenges, and prospects that are arising in the field of higher education in India.

Keywords:*Education, Rural areas, Issues, Women, Challenges, Prospects.*

Introduction

The Indian higher education system has expanded at a fast pace by adding more than 20,000 colleges and more than 8 million students in a decade and as of today, India has more than 800 universities, with a break up of Central, State, Deemed and Private universities. Better education may be very crucial for developing India. India has produced Scientists, engineers, technologists, Doctors, teachers and managers who are in terrific call all over the global. Now a day's various Issues, Challenges and Prospects have been noticed in higher Education of India. Poor infrastructure, examination ridden curriculum, memory based examinations, lack of quality faculty members, poor teaching methods, lack of funds, inconsistent government policies regarding higher education, vested political motives, huge demands of young population, political turmoil, growing privatization, lack of access and equity etc. are some of the challenges in higher education. If this issue is not improved so what is the future of our nation? The government has to focus on various problems that are being faced by students, teachers in higher education to make India "a proper developing country".

Objectives of the study

- To explore the state of higher education in India.
- To evaluate the issues, challenges, and prospects in higher education in India.

State of higher education in India

Higher education is of vital importance for the country, as it is a powerful tool to build knowledge-based society of the 21st Century. India possesses a highly developed higher education system which offers facility of education and training in almost all aspects of human creative and intellectual endeavors arts and humanities, natural, mathematical and social sciences, engineering, medicine, dentistry; agriculture, education, law, commerce and management, music and performing arts, national and foreign languages, culture, communications etc.To portray the status of higher education in the country, Ministry of Human Resource Development has endeavored to conduct an annual web-based All India Survey on Higher Education (AISHE) from 2010-11. The survey covers all the Institutions in the country engaged in imparting of higher education. The present paper tries to evaluate the state of higher education in India on selected variables on the basis of this survey.

Figure 1. Distribution of Responding Universities as per Specialization.

Source AISHE 2018-19

As per AISHE (All India Survey on Higher Education) 2018-19 by MHRD (Ministry of Human Resource Development) shows that there are total number of 993 Universities, 385 Universities are privately managed and 394 Universities are located in rural area. 16 Universities are exclusively for women with 3 in Rajasthan, 2 in Tamil Nadu, 1 each in Andhra Pradesh, Assam, Bihar, Delhi, Haryana, Himachal Pradesh, Karnataka, Maharashtra, Odisha, Uttarakhand and West Bengal. The distribution of responding universities as per specialization is shown in the Figure 1 i.e. 548% in General, 20% in Management, 63% in Agriculture, 58% in Medical, 13% in Sanskrit, 142% in Technical, 9% in Fine Arts, 9% in Language, 12% in Science, 65% in Others, and 23% in Law.

Figure 2. Number of Colleges and Eligible Population (18-23 years) in Top 10 States.

Figure 3. Management wise distribution of colleges

Majority of the colleges 77.8%, are privately managed, of which 64.3% are private unaided and 13.5% are private aided and the remaining 22.2% are Government Colleges in the Country. There are wide variations among states in number of private colleges. State wise, Management wise distribution of Colleges is shown in Figure 3. In Figure 2 shows that number of colleges and eligible population (18-23 years) in Top 10 States. The highest number of colleges in Uttar Pradesh and the lowest number of colleges in Andhra Pradesh.

Figure 4. Gender Distribution in Enrolment in Different Type of University.

Figure 4 shows the State-wise enrolment in different type of University Teaching departments and their constituent units/off-campus universities, which around 74.86 lakh with contribution of male as 42.72 lakh (57.06%) and female with 32.14 lakh (42.93%).

The above survey highlights the diversity in penetration of higher education in India.It further depicts the extent of privatization of the higher education sector of India, only 22 per cent of all colleges in the country are government colleges, however, these cater to 32.7 per cent of all college students, which is

disproportionately large. As private colleges and universities are exponentially more expensive than their government counterparts, we can conclude that the household expenditure on higher education is increasing, and effectively, the government is increasingly stepping back from its responsibility of providing affordable and subsidised higher education to the masses. Whereas most of the universities are privately owned at the same time women universities show a gloomy picture with very few in number. Further enrollment of women at higher education is also very low as compared to male counterparts.

Challenges and issues in higher education

There are many simple issues confronted with the aid of higher training gadget in India. These consist of insufficient infrastructure and facilities, vacant seats in academic discipline and bad faculty thereof, low pupil enrolment fee, out dated and antique teaching methods, declining research requirements, unmotivated college students, overcrowded and small school rooms and significant geographic, profits, gender, and ethnic imbalances. Aside from these issues touching on to deteriorating requirements and lack of facilities, there is suggested exploitation of rural area students via many private schooling providers.

The demand-supply gap: India has a very low price of enrolment in better training (18%) as compared china (26%) and 36% in brazil. There is big call for-supply hole. By way of 2020, the Indian government targets to gain 30% gross enrolment in higher schooling, which imply supplying forty million university locations with an growth of 14 million in six years.

Inadequate facilities and infrastructure: In India, many of the universities don't have ok infrastructure or facilities to train students. Even many non-public universities are strolling publications without classrooms. Net and Wi-Fi facility is nevertheless out of attain of many college students.

Decrease stage of coaching: Many of the issues like shortage of college, poor quality teaching, traditional coaching techniques, previous and inflexible curricula and pedagogy, lack of accountability and nice guarantee and separation of research and coaching are elevating questions on Indian education machine.

Studies constraints: India has a very low stage of PhD enrolment. India does not have enough high satisfactory researchers. In Indian schooling gadget there is a lack of early degree studies enjoy; a weak surroundings for creativity and innovation, and low ranges of industry engagement.

Enrolment: The gross enrolment ratio (GER) of India in better training is handiest 15% which is pretty low as in contrast to the evolved as properly as, different growing nations. With the increase of enrolments at school stage, the supply of higher education institutes is inadequate to meet the developing name for in the U.S.A. Of America.

Quality: Quality in advanced education is a multi-dimensional, staggered, and a powerful idea. Not with standing, Government is ceaselessly concentrating on the quality instruction. Still big quantity of colleges and universities in India are unable to meet the minimum necessities laid down through the ugc and our universities are now not in a function to mark its location among the top universities of the international.

Quota Problem: Bringing the reservation and quota system for distinctive categories in schooling lost its importance. Even deserving candidates of general classes are neglected and on quota we have to select different individual from reserved category even though he is no longer appropriate.

Future recommendations

To remove this problem following are the measures i.e.,

1. To inculcate student-centered education

2. Students should be given more practical knowledge than theoretical.

3. Government should take a step for promoting quality of education rather than materialistic education.

4. Libraries of various colleges and universities should indulge enough amounts of books to provide the needy students who cannot afford.

5. In higher education there should be compulsory personality development programs for students as well teachers too.

6. Women universities should be increased in rural areas because especially in rural area girls did not get a chance to go for higher education after secondary class.

7. Parents should also need to aware about the girls education because forcefully girls are married by them especially in rural area and even they do not get a chance to work outside from home.

8. Enrollment of female's in higher education is less, so these concern' should be solved by Government of India.

Conclusion

Guaranteeing quality in advanced education is among the preeminent difficulties being looked in India today. To achieve and continue global quality, certain segments are especially pertinent. There must be cautious choice of staff and persistent staff advancement, specifically through the advancement of suitable projects for scholarly improvement, including learning strategy or educating. State of Higher Education that is calling for number of reforms for example there should be expenditure not only on infrastructure but also on faculty employment. Privatization and commercialization of education system especially higher education should be stopped and more affordable fee structure should be maintained. Indian advanced education framework and administrative bodies must recognize the key issues and rapidly make approaches to evacuate those obstacles.

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A Study on International Students Satisfaction from Higher Education in Panjab University

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Abstract

There are 91 International students enrolled post-graduation and Ph.D. programmes in Panjab University. Most of these students are from Afghanistan and Iran. Attracting international students for higher education is extremely significant as it contributes to the overall economy of a country. It is of utmost importance that an institution provides quality education and best facilities to their foreign students so as to build repo in the International scenario. The aim of the study was to find out which facilities provided by Panjab University are most appreciated and to identify issues and challenges faced by international students pursuing higher education from Panjab University. Total of 84 International students from Panjab University participated in the study. A questionnaire was developed to identify the likes and dislikes of the participants about Panjab University. The survey concluded that desirable scholarships offered by the University and ICCR plays a huge part in attracting international students. The admission process is easier for the students who get scholarships. Although, many students felt the need to be provided by guides when they reach the campus after enrolment as they were confused and misguided about whereabouts of their hostels and departments. Great teaching methods and organised curriculum is really appreciated by most of the international students in Panjab University. Language is main barrier faced by foreign students in classroom communication is a big problem since most faculties teaches in Hindi or Punjabi. So, either they have to ask their teacher to repeat in English or they ask their fellow class mates to explain which they feel wastes a lot of their time. Need to improvise the use of technology have emerged to be an issue and needs to be worked upon followed by need to improve hostel facilities.

Keywords- *International Students, Higher Education, Satisfaction, Challenges*

Introduction

India is anenchanting landwith an immense knowledge of the universe and a lot of emphasis is put on the education of an individual from the minute he's born. Throughout the years, foreignuniversities and colleges have taken attentive measures like expanded post-study work visa period, created different showcasing techniques as International Education and promising alumni worldwide possibilities to draw in understudy from different nations which has brought about progressively Indian students travelling to another country when contrasted with International understudies coming to India for higher examinations.

TABLE 1.1

FOREIGN STUDENTS STUDYING IN INDIAN UNIVERSITIES/COLLEGES/INSTITUTES

	2010-11		2013-14		2014-15		2015-16		2016-17	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
PhD	583	249	730	208	876	290	883	288	1202	321
M.PHIL	56	51	39	25	38	35	37	22	53	29
POST GRAD	3812	1649	4591	1847	4654	1932	4530	1895	4871	2041
TOTAL	4451	1946	5360	2080	5568	2257	5450	2205	6126	2391

(13)

Panjab University in Chandigarh is host to 400 International students, including its affiliated colleges, seeking undergrad and postgraduate courses. Most of these students are from Afghanistan and Iran. Some International students are supported by the administration body like the ICCR or MHRD or their very own government(14). Attracting International students for higher education is extremely significant as it contributes to the overall economy of a country. Many foreign students are not aware of the educational opportunities in India. So, it is of utmost importance that an institution provides quality education and best facilities to their foreign students so as to build repo in the International scenario. The quality of education is immensely based on the best teaching staff, the excellent infrastructure, and a wide range of disciplines and to improve the placements of the students of the higher educational institutions in India. Affordable and secure accommodation and transportation play a huge part in the satisfaction of foreign students especially females.

TABLE 1.2

FOREIGN STUDENTS PURSUING HIGHER EDUCATION FROM PANJAB UNIVERSITY

	MALE	FEMALE	TOTAL
PhD	10	28	38
POST GRAD	17	36	53
TOTAL	27	64	91

Source- DIS office, PU

Objectives of the study

1. To identify the deciding factor of choosing to study in India.
2. To find out the preference of subjects foreign students are opting for.
3. To identify the issues and challenges faced by International students related to higher education from PU.
4. To find out the satisfaction of International students from higher education in Panjab University.
5. To find out the willingness of international students to work in India after their studies.

Research Questions

1. Why did the International students opt to study in India instead of their own country?
2. Why did the International students choose Panjab University for higher studies?
3. What courses are mostly selected by foreign students in Panjab University?

4. What do the International students like and dislike about studying in Panjab University?

5. What are the issues faced by foreign students in Panjab University?

6. Are the foreign students willing to work in India after their studies and why?

Limitations of the Study

International students pursuing post-graduation and Ph.D. from Panjab University only are chosen for the study.

Review of Literature: King and Raghuram (2012) concluded that there are certain contradictions between international students as they are desired because of their internationalism and fee contributions, and as unwanted because of the politics of migration control especially in the context of the securitisation of study in the post 9/11 scenario. It argues that interrogating the terms 'international' and 'students' is critical to addressing the slipperiness that underlies these contradictions.

Mazumdar and Jalgaonkar (2018) analysed the admission of students from foreign nations for the post graduate and doctoral degree. They concluded that there since the year 2010-11 there has been approximately 58% increase in the enrolment of students in PhD degree and 27% increase in the enrolment of students in Post Graduate Degree. Also there was small growth of 29% for Doctoral Degree and 24% for Post Graduate Degree of female foreign student but almost 100% growth in preference for Doctoral Degree and 28% growth in preference for Post Graduate Degree of male foreign students since 2010-11.

Srimathiand Krishnamoorthy(2019) reviewed the academic system and internationalization of countries based on India's out/In-bound. The Indian institutions have challenges to retain intelligent Indians to study in India and also to attract the foreign students. The institutions of higher learning in India must commit themselves to revisit academic integration, quality and access and create institutional capacity to attract global talent and must revamp and affirm their underlying values in inter institutional cooperation, intercultural learning and global dimension into the purpose and delivery of higher education.

Sample of the Study

Total84 International students pursuing higher education from Panjab University participated in the study.

Tools and Techniques

A structured questionnaire of 20 items, to study the likes and dislikes of International students regarding higher education in Panjab University, was developed by the investigator.

Analysis and Interpretation of the Data

TABLE 1.3 Reason for not studying in your own country

REASONS	✓	%
LESS INSTITUTES/UNIVERSITIES	64	76.3%
LESS VARIETY OF PROGRAMMES	10	11.9%
BAD POLITICAL SCENARIO	5	5.9%
INEDIQUATE TEACHING FACILITIES	5	5.9%
HIGH FEE STRUCTURE	0	0

REASONS	LESS INSTITUTES/UNIVERSITIES	LESS VARIETY OF PROGRAMMES	BAD POLITICAL SCENARIO	INEDIQUATE TEACHING FACILITIES	HIGH FEE STRUCTURE
	64	10	5	5	0

FIGURE 1.1 INTERPRETATION

76.3% of international students admit that less number of universities in the own countries is a big driving factor for them to seek higher education outside of their country followed by lack of variety of courses.

TABLE 1.4: Influence to study in Panjab University

ATTRIBUTES	✓	%
DESIRABLE SCHOLARSHIP	81	96.5%
VARIETY OF PROGRAMMES	2	2.4%
RIGID EDUCATION SYSTEM	0	0
BETTER TEACHING FACILITIES	0	0
REASOBALE FEE STRUCTURE	1	1.1%

ATTRIBUTES	DESIRABLE SCHOLARSHIP	VARIETY OF PROGRAMMES	RIGID EDUCATION SYSTEM	BETTER TEACHING FACILITIES	REASOBALE FEE STRUCTURE
	81	2	0	0	1

FIGURE 1.2 Interpretation

According to the above chart 96.5% of International students are attracted by scholarships provided by ICCR. Variety of programmes (2.4%) and reasonable fee structure (1.1%) offered also influence foreign students to study in Panjab University.

TABLE 1.5 Courses prefered by international students in Panjab University

COURSE	✓	%
MBA	47	55.9%
MSc	2	2.4%
M.PHIL	0	0
PhD	35	41.7%
OTHER	0	0

FIGURE 1.3 Interpretation

55.9% of foreign students are enrolled in MBA and 41.7% are pursuing PhD from Panjab University.

TABLE 1.6 Nature of Admission Process of Panjab University

ATTRIBUTES	✓	%
EASY	78	92.9%
COMPLICATED	5	5.9%
RIGOROUS	1	1.2%

FIGURE 1.2

92.9% of sample population are happy with the admission process of foreign students in Panjab University. Although, 5.9% students found the admission process complicated.

TABLE 1.7 Likes and dislikes about studying in Panjab University

ATTRIBUTES	LIKES	%	DISLIKES	%
TEACHING	32	38.1	8	9.6
CURRICULUM	12	14.3	12	14.3
INFRASRTUCTURE	2	2.3	2	2.3
FEE STRUCTURE	21	25	10	11.9
ENVIRONMENT	6	7.2	4	4.8
TECHNOLOGY	1	1.2	26	30.9
HOSTEL FACILITIES	10	11.9	22	26.2

FIGURE 1.3

Teaching facility provided by Panjab University is most appreciated by 38.1% of sample population followed by fee structure (25%). But 30.9% of foreign students feel improvisation in use of technology is much needed. Also, hostel facilities could be enhanced too.

TABLE 1.8

FACTORS AFFECTING FOREIGN STUDENT'S DECISION TO WORK IN INDIA AFTER HIGHER EDUCATION

FACTORS	RESPONSES	%
BETTER AVERAGE SALARIES	37	44%
MORE EMPLOYMENT OPPORTUNITIES	23	27.4%
BETTER QUALITY OF LIFE	2	2.3%
LOWER COST OF LIVING	6	7.3%
BETTER POLITICAL SCENARIO	16	19%
OTHER	0	0

Interpretation

All of the participants in the survey are willing to work in India if given a choice and 44% of sample population feel India has better average salaries than their country and 27.4% feel there are more employment opportunities here.

Conclusion

- International students studying at Panjab University admit that there is a lack of good universities and there are not many options of courses to select from, which is why they preferred to seek education in other countries.

- Most of the foreign students pursuing higher education from Panjab University were influenced by desirable scholarships offered by the University and ICCR, followed by a reasonable fee structure of Panjab University. The scholarships include tuition fees and accommodation fees.

- Most foreign students are enrolled in the MBA and Ph.D. course and are satisfied with the admission process of Panjab University especially for the students who get scholarships. A few students who do not have scholarships felt that the admission process was a little complicated. Also, many students felt like they should be provided by guides when they reach the campus as they were confused and misguided about whereabouts of their hostels and departments.

- Great teaching methods and organised curriculum is really appreciated by most of the international students in Panjab University. But, many students admitted of having a language barrier in the classroom since most faculties teach in Hindi or Punjabi. So, either they have to ask their teacher to repeat in English or they ask their fellow classmates to explain which they feel wastes a lot of their time.

- Although, less use of technology has emerged to be an issue and needs to be worked upon followed by the need to improve hostel facilities.

- All of the students would like to work in India if provided with a good opportunity as they feel the average salaries in India is more than their country and they would advise their friends/relatives as they are liking the facilities provided by Panjab University and are really pleased with the experience.

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Fostering Innovation by Promoting Emotional and Spiritual Intelligence among the Children

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Abstract

Emotional intelligence and Spiritual Intelligence are key elements in providing guidelines towards an individual's achievement especially students. One's level of intelligence does not depend only on their level of intellectual intelligence. In fact, it also depends on emotional and spiritual intelligence which is seen as the element that could influence the teaching-learning process. This paper discusses the importance of emotional and spiritual intelligence. The awareness of the need to enhance emotional and spiritual intelligence should be given emphasis in the current educational system. Hence the key methods to develop emotional intelligence and spiritual intelligence are also discussed.

Keywords*: Emotional Intelligence, Spiritual intelligence, Significance in teaching-learning.*

Introduction

Teaching is an active process in which one person shares information with others to provide them with the information to make behavioral changes. Learning is the process of assimilating information with a resultant change in behavior. Thus teaching-learning process is a planned interaction that promotes behavioral change that is not a result of maturation or coincidence.

The objective of education is individual growth in the aspect of intellect, physical as well as spiritual and emotional. The teaching-learning process in educational institutes involves the development of students' potency by empowering the academic merely. But to achieve the objective of education expansion of students' morality and personality is also important. Well-rounded individuals can be produced by developing a balanced intellectual, emotional, physical and spiritual intelligence. Emotional intelligence (EI) and spiritual intelligence (SQ) play a much greater role in solving problems and making decisions in any context.

Emotional Intelligence

Emotional Intelligence (EI) is a group of mental abilities that could help to identify and understand the feelings of others. The word emotion means moving, happiness and hesitation (Mohd. Azahar Abdul Hamid, 2006).EI term was first used by a physiologist named Peter Salovey and John Mayer in the year 1990.Five years later, Daniel Goleman popularizes EI in his book Emotional Intelligence.

Daniel Goleman's (1995) research on emotional intelligence, based primarily on intrapersonal and interpersonal intelligence, indicates that success in many areas of life depends on emotional skills as much as on cognitive capacities. Emotional intelligence includes self-awareness and self-control, as well as the ability to get along well with others. Getting along with others implies an ability to listen, to communicate, to accept feedback, and to empathize with different points of view.

Characteristics of Emotionally Intelligent

Emotional intelligence is being able to maneuver through obstacles and making good decisions in the middle of rough circumstances. A person can be under extreme pressure, yet still be able to function under that stress and pressure.

Self awareness is a key element in emotional intelligence. A person needs to pay attention to details in their environment. EI persons are aware of their weaknesses and strengths.

Emotionally intelligent people know how to solve the problem. They see and gather all the information provided in any situation, research more and bring all parts together into the whole in creating the big picture and end result in a positive conclusion. They are very optimistic, push against the grain and work hard regardless of what the situation or circumstances looks like in the moment. They have a vision for the future. They set goals. They do not sit and wait for things to happen but get involved whether the moments present stress or difficulties.

Emotional intelligent persons believe in a higher source or god that will make their way for them. They are walking by faith and by sight. They are much stronger in sense because they feel that they are put here on earth to complete a specific purpose destined by god.

EI persons will listen to others to hear what they say, being considerate and pay attention to the details of what is being said. EI people also that failure is a part of succeeding. They are not persuaded with emotion when they understand failure is what leads them to success.

Meaning of Spiritual intelligence

Spiritual intelligence is the expression of innate spiritual qualities through your thoughts, actions and attitude, says Brahmakumari Shivani.

According to Varma (2011) to be 'spiritual' is to think, act and interact from an awareness of self as spirit not form, soul not body. Most of us are taught to believe we are our physical forms, and so we identify with our body or the labels we give to our bodies such as nationality, race, gender, profession etc. This wrong sense of self is what creates all fear, anger and sadness in life. From a spiritual point of view these emotions are always the result of ego (misidentification), which then blocks access to your true spiritual nature which is peaceful, loving and joyful.

Intelligence is to use what you know in the right way at the right time in the right place with the right intention. For example if you 'know' yourself as a spiritual being you will also 'know' that you do not own or possess anything. When something in your life is damaged or lost, it does not affect you in any way - you are able to use your spiritual power to accept and move on.

Emmons (1999) describes spiritual intelligence as a cognitive ability to envision unrealized possibilities and transcend ordinary consciousness by applying basic thought processes that have both temporal and existential meanings. Zohar and Marshall (2000) defined spiritual intelligence as the intellectual ability to question why we are here and to be creative in our pursuit of answers. Spiritual intelligence is rooted in the human need for understanding the world and our place in it.

According to Muhamad MahyudinNafis (2007), there are nine ways that could form emotional and spiritual intellectual when the individual has patience, gratefulness, engrossment, good perceptions, honesty, good relationship, depends on god, sincerity, and pietism.

According to Zohar and Marshall (2000), Spiritual Intelligence is intelligence that encountersthe question of meanings or 'values'.Zohar and Marshall (2000) regarded SI as more complete compared to EI because other than being based on the emotions itself, SI is also based on human socio and spirituality. Thus SI is seen as the platform needed to operate human's brain and emotions effectively. This means that by

having high spiritual intelligence, one could control his or her emotions well and later influence good thinking towards certain individuals.

According to Vaughan (2003) spiritual intelligence refers to various skills and abilities that empower you to live in harmony with your highest values and move unswervingly towards your life goals

- with a Heart that is open and flexible,
- with Enthusiasm,
- with Awareness of your present experience and of the presence of the divine,
- with Respect for and service to others and the world, and
- guided by the Traditions of your highest values and ethics.

This inquiry into spiritual intelligence suggests that it is one of several types of intelligence and that it can be developed relatively independently. Spiritual intelligence calls for multiple ways of knowing and for the integration of the inner life of mind and spirit with the outer life of work in the world. Spiritual intelligence is necessary for discernment in making spiritual choices that contribute to psychological wellbeing and overall healthy human development.

Spirituality may also be described in terms of ultimate belonging or connection to the transcendental ground of being. Some people define spirituality in terms of relationship to God, to fellow humans, or to the earth. Others define it in terms of devotion and commitment to a particular faith or form of practice (Anastoos, 1998).

The significance of emotional and spiritual intelligence

Philosophy of education is a democratic medium that based on the attitude of respecting the individual as a student and consider the study and knowledge as a way to help students in overcoming each difficulty in life (Ibrahim Shihab, 1973). To achieve this objective, any action that involves pressure, constraint, violence should be avoided. Instead of that, the individual should make an attempt to discover the determination and tendency within him. The determination exists within himself which appears as the spiritual element that able to shaping his personality. Thus, it is important to emphasize on emotional and spiritual intelligence.

Emotion is closely related to feeling and the way to manage it. According to Goleman (1998), emotional intelligence is the human's ability to understand his emotions and employ it to make an effective decision within his life. In the context of human's life, emotion is able to help an individual to manage the sense of disappointment, sad as well as the negative feeling properly.

Spiritual is connected with the soul and the religion, and not with physical things or ordinary human activities. Spiritual or else the individual's mentality itself is linking to our intuition and self-perception, in the way we present our though. As both are relating to our spirit rather than the body, these terms are interconnecting with each other.

In the context of education, the teaching of moral studies in schools, for example, promotes emotional and spiritual intelligence among the students, whereby it teaches the students to uphold moral values and their devotion towards God. For instance, the significance of emotional and spiritual intelligence within the realm of education can be seen in looking at the role of both aspects in overcoming the social problem among teenagers. Social problems can be prevented if the teenagers gain the elements of mankind, which can also develop our though, including the entire mind and personality (Philips & Callan, 2001). Highly emotional disturbance is not only influencing the behavior, but also attitude, and the condition of psychological, as well as their ability. Psychological problems are also increasing rapidly.

In the contexts of students' life, their inability to cope with stress had caused the psychological problem

among of them. Thus, the implementation of emotional and spiritual is very important, which is not only developing students in terms of their intellect and physical aspects.

Emotional and spiritual intelligences give a liberty towards individual to explore his self potential. The internal's factor, which is related to self and physical development for human is able to influence the students' activities . The maturity of body, mind, and soul determine the success of students' activity, as well as prevent them from the disheveled physical once they face a failure.

When relate to a learning context spiritual intelligence is very much related to emotions and intellectual in order to ensure a student to achieve a high mastery of subject. A good and pure spiritual will cause one to have a deep desire to achieve a particular wish and this will encourage him or her to work hard to achieve his or her dreams. This situation will ensure the gaining process to go smoothly and become easier.

With high spiritual intelligence, students could also solve all problems and avoid negative attitudes. High level of SI will also help students to control their laziness to study, avoid all the other emotional disturbances which could lead to negative impacts in influencing their mastery of language level.

Integrating Emotional Intelligence and Spiritual Intelligence

Being able to recognise, understand and respond to the emotions of others requires a level of emotional literacy that can only be developed by learning to recognize one's own feelings and emotions (self-awareness again). This falls squarely in the arena of emotional intelligence.

However there is another layer below, which is the cause of the emotions. We tend to learn that the cause of our feelings and emotions are external events and other people's actions. But they are not. All emotions are caused by the self. Seeing the original cause, and understanding what it means, is the territory of spiritual intelligence.

Emotional intelligence is necessary to understand and control one's emotions and feelings, while being sensitive to the feelings of others. Spiritual intelligence, on the other hand, is necessary -

* To find and use the deepest inner resources from which comes the capacity to care and the power to tolerate and adapt

* To develop a clear and stable sense of identity as an individual in the context of relationships

* To identify and align personal values with a clear sense of purpose

* To live those values without compromise and thereby demonstrate integrity by example

* To understand where and how each of the above is sabotaged by the ego

Methods To Develop Spiritual Intelligence And Emotional Intelligences

Arts, music, storytelling and other right brain activities integrate the emotional color and flavor into the process of education. Daniel Goleman observes, "The logic of emotional mind is associative; it takes elements that symbolize a reality, or trigger a memory of it, to be the same as that reality. Great spiritual teachers, like Buddha and Jesus have touched their disciples' hearts by speaking in the language of emotions, teaching in parables, fables, and stories. Indeed, religious symbols and ritual make little sense from the rational point of view; it is couched in the vernacular of the heart." (Goleman, 1995).

The key methods to learn and develop spiritual intelligence are:

Meditation: Meditation is the cultivation of self awareness. Meditation will help you restore the ability to control your thoughts and feelings, sharpen your ability to discern truth from illusion, and thereby make more intelligent choices.

Detached Observation: This is the ability to disengage from the world of action and interaction outside yourself, and to disengage from the world of thoughts and feelings within your consciousness. This practice is also essential in order not to 'waste' energy at mental and emotional levels, where much of your tiredness has its origins.

Reflection: This involves taking time out on a daily basis to review and re-assess past experiences of the interactions with others. This allows the self/soul to build awareness of the connection between inner world of thoughts and feelings and the outer world of action and the consequences of those actions.

Connecting: There is a higher source of spiritual power and it is possible to connect with that source and empower oneself. This accelerates the developmental process increasing both the depth and breadth of your spiritual intelligence. Energy absorbed from the Supreme Source is essential to clearing the inner clutter and to focus your consciousness.

Practice: New learning, new insights, new realizations are only theories and have no power to change your life unless they are brought into action, allowed to shape new behaviours, and then perfected in the process of expression. Practical action is essential to sustaining the momentum of developing spiritual intelligence.

Seeing: Spiritual vision is learning to see only the best in others and by doing so empowering others to develop the best in themselves. From a spiritual point of view seeing is creating - how you see the 'other' is how you will create the other within you, which will be both a reflection of how you see yourself at that moment and the quality of the energy you will then give to them.

Role of Teacher in Developing Emotional and Spiritual Intelligences

Nowadays, throughout the rapid change of time, there are negative elements that harm the life of teenager, especially the students. Besides, there is no attention towards the elements that able to consolidate their belief towards religion, culture as well as the implementation of values within their life. If this situation keeps occur the students will lost their belief and the faith of life. Thus, teenagers should have firm mental and spiritual. This objective can be achieved through the implementation of emotional and spiritual intelligence since they were at school. From this, the quality of students' characteristic and attitude are able to be enhanced.

According to Goleman (1995), to gain success at school the students should have the confidence, curiosity, intentionality, self control, relatedness, capacity to communicate, and the ability to cooperate. These traits are all aspects of emotional and spiritual intelligences.

Unlike the developmental process of intellectual and physical intelligences that involves drill and practices, the developments of emotional and spiritual intelligences are more subjective and abstract. Thus, the contribution and the involvement of the teachers are very important in realizing this aspect. Teacher is able to become a role model towards the students. They are able to motivate their self to become a good educator and carry out their responsibility effectively.

They should give guidance towards the students on how to handle the emotional problem, the way to cooperate with the others as a team, as well as help them to explore their strength and weakness. Once the students are able to control their emotion, they are able to give fully attention in class.

The good and positive teacher will produce the interesting and pleasurable learning activity, as well as increase the students' academic achievement. Increasing the enthusiasm of the students towards the education, teachers should arrange the pleasure surrounding of classroom such as group discussion. According to Jacobs and Ratmanida (1996), learning in grouping is more affective to stimulate and strike

the values such as motivation, confidence, interest to study, as well as cooperation with others.

The aspects of emotional and spiritual intelligences that can be implemented within the teaching and learning activity include the sensitivity of the teacher towards the school's surrounding and the way they concern on their students. It is because, within the process of teaching and learning activity, the role of teacher is not only imparts the knowledge, but also involves the role as an instructor and aware the emotion of the students. From this, teachers are able to make the appropriate outline in order to increase the academic achievement and the attitude of their students.

Conclusion

Real education must consider the whole child and the purpose of human life and civilization. Real education must acknowledge the spiritual and emotional development of the child; the importance and influence of the arts and real happiness on the education process; and integrate them into the curriculum and evaluation process. Integrated education of this nature will enable the students to connect through shared emotional experiences and to reach their full potential as the images of their higher selves, the divine Spiritual guidance within the education helps students to know their directions in life, which will also help to build students' motivation towards their studies.

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Women Empowerment through Higher Education: Role and Contribution of English Literature

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Abstract

The purpose of studies is to "weigh and consider", so said Francis Bacon, a sagacious English essayist of the sixteenth century. Education definitely plays a sacrosanct role in transforming and shaping the individual consciousness of humans as well as the collective consciousness of a society. It is through education we are revealed lofty truths of life which help us to unveil the countless enigmas and mysteries of life which tend to befuddle us at times. But when it comes to higher education, our expectations naturally soar. We expect it to be an empowering phenomenon. The modern world which we inhabit is a complex world quagmired by multiple challenges that sometimes tend to threaten the collective development of humanity. The education is now supposed to play the role of an adhesive ending the age-old segregations and divisions among various factions of human society. Empoweringwomen is certainly a litmus test for entire humanity since no nation or economy can think of development without assigning due importance to women which constitutes half of our population. The crimes against women need to be dealt with an iron fist. The women too is expected to rise to the occasion and accept new challenges. In addition to that we require to bring a paradigm shift in patriarchal attitude of males so both stakeholders may embark on a new voyage with more aplomb. The role of English Literature in accomplishing this objective cannot be pushed under the rug. A careful glance at history of women's cause brings it on fore how it was Simone de Beauvoir, a French novelist, who in her epoch-making novel, 'The Second Sex' first made entire society understand that, "One is not born, but rather becomes, a woman."This statement was first Clarion call to humanity which is still fresh in our memory.

Keywords *:Empowerment,Economy, Education ,Higher Education, English Literature.*

Historical Perspective

From the time immemorial women have been treated unfairly by their male counter parts Throughout the world women was subject to endless torture and subjugations. She was considered as something inferior and irrational as compare to males. She was denied the right of education and right to vote which proved to be biggest bottlenecks in her progress. It was generally perceived that she was meant to be confined in four walls of the house and act as subservient to the males. It was no lessthan prominent thinkers like Rousseau who once claimed:

"Once it is demonstrated that man and woman are not, and should not be constituted the same, either in character or in temperament, it follows that they should not have the same education. In following the directions of nature they must act together but they should not do the same things; their duties have a common end, but the duties themselves are different and consequently also the tastes that direct them. After having tried to form the natural man, let us also see, in order not to leave our work incomplete, how the woman is to be formed who suits this man."He further argues and suggests how women should behave in society"If woman is made to please and to be subjugated to man, she ought to make herself pleasing to him rather than to provoke him; her particular strength lies in her charms; by their means she should compel him to discover his own strength and put it to use. The surest art of arousing this strength is to render it necessary by resistance. Thus pridereinforces desire and each triumphs in the other's victory. From this originates attack and defense, the boldness of one sex and the timidity of the other and finally the modesty and shame with which nature has armed the weak for the conquest of thestrong."

In this way we can see how these influential thinkers shaped a collective consciousness which denied basic rights to women. Till twentieth century, such kind of stereotype thoughts prevailed and women was compelled to remain at back burner of society. However, it was in the last part of twentieth century women fought for her rights. Some of the powerful women came forward and motivated their fraternity to fight tooth and nail for their liberation.

In the countries like India situation was grimmer. During the British regime, we witnessed reprehensible social practices like sati pratha where women was immolated alive along with her dead husband. The reformers like Ishwar Chander Vidyasagar promoted rights of women and championed the cause of widow remarriage.

Role and contribution of english literature

If we go back to history of women subjugation, we see how English writers and critics played highly instrumental role in creating a favorable atmosphere for women and fought for their cause. Literature played a sacrosanct role in raising and coughing up concerns of women. The various feminist movements served as a catalytic agent in transforming our consciousness towards these issues. Feminist movements have campaigned and continue to campaign for women's rights, including the right to vote, to hold public office, to work, to earn fair wages, equal pay and eliminate the gender pay gap, to own property, to receive education, to enter contracts, to have equal rights within marriage, and to have maternity leave. Feminists have also worked to ensure access to legal abortions and social integration and to protect women and girls from rape, sexual harassment, and domestic violence. Changes in dress and acceptable physical activity have often been part of feminist movements. The most influential voice in this field was of French novelist Simone de Beauvoir who in his seminal work 'The Second Sex' (1949) created a revolution by carefully analyzing all the causes which have been responsible for plight of women. Her research was objective and stirring. She threw her tantrums against a male dominated social order which viewed women as inherently weak and docile ,"Representation of the world, like the world itself, is the work of men; they describe it from their own point of view, which they confuse with absolute truth." She further remarks that social orientation of women is such that she is made to be surrender before this ignominious set-up, "To be feminine is to show oneself as weak, futile, passive, and docile.

It was after her a lot of other women dared to demolish male hegemony and carve a niche for themselves. The women all over the world United and put a brave face to this menace. The third wave of feminism which proved decisive in this war was also literary. The revolt became more aggressive and open. term third wave is credited to Rebecca Walker, who responded to Thomas's appointment to the Supreme Court with an article in Ms. magazine, "Becoming the:

So I write this as a plea to all women, especially women of my generation: Let Thomas' confirmation serve to remind you, as it did me, that the fight is far from over. Let this dismissal of a woman's experience move you to anger. Turn that outrage into political power. Do not vote for them unless they work for us. Do not have sex with them, do not break bread with them, do not nurture them if they don't prioritize our freedom to control our bodies and our lives. I am not a post-feminism feminist. I am the Third Wave."

Third-wave feminism also sought to challenge or avoid what it deemed the second wave's essentialist definitions of femininity, which, third- wave feminists argued, over-emphasized the experiences of upper middle-class white women. Third-wave feminists often focused on "micro-politics" and challenged the second wave's paradigm as to what was, or was not, good for women, and tended to use a post-structuralism interpretation of gender and sexuality. Feminist leaders However, all these revolts brought a positive change. New Zealand became first country to grant women right to vote. Thereafter other countries followed the suit. Now women is in much comfortable and better position than past. Women Empowerment and Role of higher education

It goes beyond doubt that education and higher education particularly has a bigger role to play in this field. By women empowerment we mean when women is included in the process of decision making andaccorded more freedom to make her priorities. This can only be done through higher Education. Through higher education we can fuel the imagination of our girls to rise high in life. She can be liberated through economical means. Better jobs and working condition can have a positive impact on her development. She needs to be economically self-reliant bereft of that no real freedom is possible. It was just her quest for education that made Malala yousafzai a noble prize laureate. Education is certainly agame changer. It gives us a vision to view life and make a strategy to combat challenges of life.

Conclusion

There is no doubt about it that situation has drastically improved. Social media has brought a new revolution of awareness. We have multiple platforms to raise our voices against injustice. The recent movementlike "Me too" has inculcated a new degree of aplomb in women to expose those who dare to treat women as object for sexual gratification. But, much remains to be done at ground level. We need to strengthen our primary education, health care for women and provide fast legal remedies in case of any offence. We need to instill a sense of security in their minds so that they may equally contribute to progress of this nation. Let us remember no economy of world can think of any sustainable development if half of its work force is not meaningfully employed.

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Study of Aspiration for Higher Education among Girls

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Abstract

In relation to higher education it is hard to argue against the desirability for all young people to have high aspirations for their future, including educational and connected life goals. Mau & Bikos studied the importance of school, family, personal/ psychological, race, and sex variables in predicting educational and vocational aspirations. Female students, on the average, had higher educational and vocational aspirations. Patricia & Daniel studied the factors which influence career choices and aspirations of students attending colleges in the south. Major concerns were social and family backgrounds, motivational characteristics, civil rights, and educational experiences encourage in making choices about their futures. The results indicated that elementary and secondary teaching careers were the first professional choice; high achievement orientation and sense of personal control were related to aspirations for jobs. Keeping in view the above, the present study was conducted to assess the aspirations among girls for opting higher education. Semi structured interview schedule and informal group discussions were conducted with randomly selected 200 girls studying in Chandigarh city to assess the aspiration for pursuing higher education. It was found that girls choose higher education for social reason (90%) as their father inspire more than to mother. While choosing field of study aptitude 67%, knowledge 9% and physical fitness 56% etc. were the reasons shared by girls. Girls aspire to be equal and competitive with boys. They do not want to remain in the image of "housewife" as they aspire to opt some constructive job and contribute in the family income. Further they go for college education to empowered economically (80%) and socially (100%). It is concluded that government programs and policies are boosting up the community in making them literate and skill development.

Introduction

Higher education is tertiary education leading to award of an academic degree. It is also called post-secondary education, final stage of formal learning. It also empowers and provides the freedom for excellence for the female society. The present scenario witnesses a decent number of women from relegated section are in the higher education. The scholarship or financial support and the support of the family are like a catalyst in bringing the change in their roles, status and position of women in society through the promotion of education. Importance to higher education was given in Eleventh Five-Year Plan (2007-12). The government established central universities, undergraduate college, research centers

etc. The importance of women as a male counterpart and substantial human resource was taken seriously. Thus, focus was given to involve women as equal partners in Universities, colleges and various institutes in India. They have indeed made significant strides during the past six decades entering every field of education, and taking on the challenge of various professions. However, masses of women still remain restricted by the vicious circles social stereotypes and stigma. Women from different socio-economic strata have a great deal of disparity in their life-situations. There are also significant differences in women's specific status across regions, caste and class, communities and religions.

Aspiration for Higher Education

The concept of aspiration is seductive. It is embedded in social and cultural realities. In relation to education it is hard to argue against the attraction for all young people to have high aspirations for their future, including educational and related life goals. The argument in favour of raising and maintaining high aspirations suggests the idea that regardless of individual structural conditions, material circumstances, or starting location, education can provide the same opportunities for all to succeed if they only have a desire to do so... accepting the idea of aspiration as an innocuous function of the education system. There are many advantages of women higher education like reduce infant mortality, reduce maternal mortality, improve socio economic growth, reduce child marriage, reduce population explosion, and decrease malnutrition. ...increase involvement in political process, reduce domestic & sexual violence etc. Educating a girl has always been a challenge in the whole world and especially in our country. From very old age, girls were never allowed to study. People used to think and still, some think that investing in a boy's education would be more beneficial rather than a girl because she will anyhow go to another house. They have kept in their mindset that girls are meant to be a cook and a homemaker. As the major fundamental mentality is attached to the marriage of People in India think that a girl will ultimately go to her husband's house. And hence her fate should remain to the four walls of the house. His particular kind of mentality became a big barrier in the education of girls. Many disadvantages also came of girls higher education. Now it becomes difficult to manipulate women, its destruction of patriarchal society, adjustment problem, number of broken homes etc.

Review of literature

Carpenter and Western have studied longitudinal study of the processes by which selected structural, social-psychological, and group variables influence the capacities and achievements in both educational and occupational spheres of young people The model is found to have more explanatory power for men than for women. For both groups the perceived influence of parents, teachers, and peers bears the major impact on aspiration formation. Social origins are more important in aspiration formation for women than for men although for both groups mediating and direct effects are observed. Schooling also has mediating effects for both groups and direct effects among men. It is concluded that, while the analysis provided strong support for crucial elements of the social-psychological theory of aspiration formation, there are linkages for status transmission not identified in the model.

Curtis, David; Drummond, Aaron; Halsey, John; Lawson, Michael J have studied that Students from rural and low socioeconomic backgrounds do not pursue university education at the same rate as those from metropolitan areas or from higher socioeconomic backgrounds. This has been a long-standing issue for government. This study explores the aspirations and intentions for university education among low socioeconomic status (SES) and regional school students and looks at how peer-mentoring might influence them . there is a substantial difference in the rates of higher education participation of metropolitan and rural young people, this difference is not attributed simply to location but rather to other factors associated with location; and (2) Compared with their peers from higher socioeconomic backgrounds, low-SES students have less favourable attitudes towards school, lower achievement at school, less

ambitious post-school study and career aspirations and lower participation in higher education.

Australian government focused on raising the aspirations of students from low socioeconomic status (SES) backgrounds to enhance their participation in higher education. Aspirations were assessed in terms of occupational such as occupational choice, occupational prestige, and occupational justification. They also analyzedthe complexity of students' career aspirations and challenges associated with it. This type of research give way in the development of policy and interventions in this field. (Jim Albright Jennifer ,Max, Smith, and Jim et al.)

Wei Cheng Mau and Lynette Heim Bikos studied the importance of school, family, personal/psychological, race, and sex variables in predicting educational and vocational aspirations. In longitudinal study of 10th-grade students, the educational aspiration model was more robust than the occupational aspiration model regardless of sex and race. When compared with other groups, Asian Americans had the greatest increase in educational aspirations. Female students, on the average, had higher educational and vocational aspirations.

Gurin, Patricia; Katz, Daniel studied the factors which influence career choices and aspirations of students attending colleges in the south. .Major concern were social and family backgrounds, motivational characteristics, civil rights, and educational experiences encourage in making choices about their futures. Data collected were on specific measures of occupational aspiration, class background, family influence, motivation, and institutional characteristics. the results indicated that elementary and secondary teaching careers were the first professional choice, high achievement orientation and sense of personal control were related to aspirations for jobs and realistic aspirants were more likely than under- or over-aspirants to attribute the failure of other negroes to problems of racial discrimination.

Sarker et.al. investigated how gender inequality in higher education is produced by the attitudes of parents in rural Bangladesh. To this end they examine (i) parental traditional gender role attitude, (ii) parental attitude toward girls' capability and (iii) parental gender biased investment attitude as three types of parental attitudes based on the responses of 435 rural parents in which 52.05% were parents of boys and 56.25% of girls. Results show that after controlling the parental background variables (income and education), these three types of parental attitudes have individual significant impact on parental educational aspiration in which, if these attitudes increase, it significantly decreases the odds of having parental aspiration of higher education for their children. Furthermore for boys and girls they observe that if these three types of attitudes increase, the likelihood of having parental aspiration of higher education significantly increase only for the case of boys but significantly decrease for the case of girls.

Rationale of the study

Existing review of literature pointed out the girl's situation towards the higher education. Girls aspire to study in competition to boys but they do not have such freedom of choice to join college. They do dreaming to achieve something in life. Therefore present study is an effort to fulfill the following objectives:

Objectives:

- To assess the reasons among girls for pursuing higher education.
- To assess the inspiring agents for pursuing higher education.
- To find out the criteria to select the field of higher education.

Methodology

Research Design

The study followed a qualitative methodology approach, Semi-structured interview schedule and

informal group discussion were administered on the randomly selected 200 girls to assess the aspirations for pursuing higher education. Girls studying in different areas of social sciences and humanities were randomly selected from the colleges of Chandigarh. Questions were based on reference literature about gender stereotypes, gender differentiation in higher education and the values about professions.

Results and Discussion

Table No. 1 Reasons for pursuing higher education by girls.

Sr. No.	Reasons	Frequency N=200	Percentage
1.	**Social**		
a.	Freedom	120	60%
b.	Enjoy college environment	160	80%
c.	Exposure of city life	80	40%
d.	Unity and trust	80	40%
2.	**Academic**		
a.	To obtain degree	180	90%
b.	To enhance knowledge	100	50%
c.	Pursuing a passion	120	60%
d.	Career preparation	160	80%
3.	**Personal**		
a.	Skill enhancement	120	60%
b.	Job satisfaction	140	70%
c.	Greater sense of discipline	100	50%
d.	Higher income	160	80%
e.	Better communication	180	90%
4.	**Family**		
a.	Higher lifetime income	180	90%
b.	Parent education	160	80%

Table 1 depicts the reasons for pursuing higher education viewed by girls. It was found that personal and academic reasons were given more preference. The position of a social reason within rankings came third, with of girls stating that this was the most important factor. Something that appeared to have the least importance to prospective girls was the opportunity to make friends with people from different cities and enjoy city life. Mohney's (1987) study brought out crucial factors, which influence women's personal decision to enroll in higher education 1. Predisposing Factors- competency based motives, career development, sense of 'time is now'; security based motives, family of origin, and intrinsic reward. 2. Enabling Factors- role demands lessened, support from others, financial ability, self-image needs and job needs. 3. Barriers to Prior Enrolment - role demands, child-related variables, self-image, family of origin, finances and unavailable classes.

There are 80 million teenage girls in India. A clear understanding of their current realities and their aspirations is essential in order to design effective policies for them. Survey by Naandi Foundation carried out on the TAG (Teen Age Girls) under the aegis of Project Nanhi Kali to assess aspirations on education, career, marriage, their ready access of gender equality. 70%, of girls report desire to pursue higher education. The goal of studying up to graduation emerges as a key variable affecting aspirations related to age at the time of marriage. An urban-rural split is clear with about 80% urban girls wishing

to pursue higher education versus just about two-thirds of girls reporting a similar desire in rural areas. It is interesting to know that more girls 73.3% aspire to marry after the age of 21.Personal factors that tended to encourage or discourage from pursuing higher education. Fame of the institution and the courses offered the opportunity to meet new friends, nearness to home were the reasons to choose higher educational institutions.

Table No. 2. Inspiring factors for pursuing higher education

Sr.No.	Inspiring factors	Frequency N=200	Percentage
1.	**Extrinsic factors**		
a.	Mother	**120**	**60%**
b.	Father	**160**	**80%**
c.	Peer group	**170**	**85%**
d.	Teacher	**180**	**90%**
2.	**Intrinsic factor**		
a.	Self motivation	**180**	**90%**
b.	passion	**160**	**80%**

Table 2 highlighted the inspiring agents for pursuing higher education. Girls students shared that their father (80%) aspired more than compared to mother (60%). Girls (85%) replied that the peer group have more than parents to go to college education. According to Indo Issa Benna the women's urged to become role models as influenced by the parents' level of education and encouragement from their teachers. Relatives motivate the girls to awareness of religious knowledge. Not only parents or immediate relatives, but also neighbors take interest in the life of girls. Thus, the decision to allow daughters to go on to higher education tends to be essentially a common one.

Dang resulted that about 74% of the surveyed girls wished to work after studies. An overwhelming percentage of young girls reported their aspiration to learn English. At a cursory level since English is a career enabling language, the aspirations to learn English can be understood to be a good proxy to gauge the willingness of girls to participate in the labour force. Similarly, a high percentage of the surveyed girls reported a desire to learn how to operate a computer. Again, digital skill sets are strong career enablers and indicate a desire to being self-sufficient among young teenage girls.

Table No.:3 Criteria to select the field of higher education.

Sr. No.	Criteria	Frequency	Percentage
1	Creativity	160	80%
2	Physical fitness	180	90%
3	Interest	200	100%
4	Environment	160	80%
5	Good academic results	160	80%

Table No.3 highlighted the criteria to select the field of higher education.

It was found out that girls choose higher education option for social reasons (90%) rather than academic purpose (78%). Father inspire more than mothers to join colleges. While choosing the field of education aptitude (67%), knowledge (9%) and physical fitness (56%) etc. were the reasons shared by girls. Choosing and enrolling in a higher education degree and, consequently, selecting a profession, is still conditioned

by social and cultural factors characterized by gender stereotypes that continue to attract more men to technical and technological careers and more women to teacher training and social work. However, the nature of gender inequities changed over the recent decades, becoming more complex. This complexity can be observed in the men and women's career preferences. Even considering that vocation influences the choices, the stability that some careers represent, regarding the immediate access to employment and to reasonable salaries also influences the options made by men and women. Besides that, literature has been highlighting that both the students' self-perception and the perceptions about degrees and social encouragement also influences their choices. There seems to exist an image of man and woman associated with some degrees and professions. Although all of the students assume a complete freedom of choice for enrolling higher education degrees, the options seem to be determined by social and gender stereotypes and also by professional stability.

Conclusion

It is concluded that despite the government initiatives, people take rigid decision towards the girl's education such as limitation on colleges, courses and subjects. Coaching facility, transport problem and financial cut off also were the obstacles in approaching higher education for the girls. These factors contribute to the low level of girl's participation in higher education. Thus, this study is an important contribution when viewed against the background of the potential role of girl in higher education and their potential contribution to development.

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Role of Cad Training in Quality Enhancement of Graduates

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Abstract

In today's knowledge-based economy, educational achievement is an increasingly important factor. The quality of higher education has traditionally been associated with strong teachers having high degrees of personal contact with learners. At present, higher education is experiencing a major shift in terms of access, equity, and quality. This change is highly excited by the swift developments in information and communication technologies (ICTs) especially computer-aided design. Computer-aided design is gaining popularity due to its simplicity and accuracy in drawing and illustrations and with this emerging technology, it has become an indispensable part of design professions, and therefore education. The use of computers in education not only improves the classroom teaching-learning processbut also provides the facility of e-learning. The adoption and use of the computer-aided design in education have a positive impact on teaching, learning, and research. Computer-aided design has also set an educational standard to define the measurable learning objectives and skills that students need for higher education and the demands of 21st-century jobs. This review paper highlights the role of Computer-aided design study and new media technologies in the curriculum of the design undergraduates and postgraduates for the enhancement in the quality of education and understanding future challenges. The methodology followed is descriptive in nature. It is found that more and more educators are recognizing the importance of this technology in their curriculum and setting standards to fulfill the expectations of the industry for digitally trained employees. This review will also create awareness among the educationalists for incorporating the CAD study in the education curriculum.

Introduction

Thefashion designeducationrequires a high level of visualization of the study process[1, 2]. Theapplication of the innovative educational and design technologies offers quality improvement ofhigher education in fashion design by interactivity, flexibility and dynamics.At the dawn of the twenty-first century, new and rapidly improving technologies are in the process of transforming higher education. This technology can eliminate the barriers to education imposed by space and time and expand access to lifelong learning. Computers are the main technology reshaping higher education and promote collaborative learning. They have become an inseparable part of today's teaching learning

process especially in the case of the young design students who are taught by the means of digital design technology which is also known as Computer-aided designing or CAD. In higher education, some old content is relatively removed or replaced with the updated part of the content to keep the pace of the development of the times and enhance quality in the teaching-learning process. In simple terms, when one is assisted with a computer in the manipulation of graphics and mathematical representation of designs within the computer using particular software and hardware, this is referred to as Computer Aided Design (CAD). It is the technology concerned with the use of digital computers to perform certain functions in design and production. According to Zeid (1991), Computer Aided Design (CAD) can be defined as the intersection of three sets, geometric modelling, Computer graphics, and the design tools, based on their constituents. Groover and Zimmers (1999) state that, computer aided design involves any type of design activity which makes use of the computers to develop, analyse or modify an engineering design. According to Kazlacheva (2005), CAD systems help in design, constructing and modelling of garments with rapidity and extra accuracy. CAD is an important industrial art used in various fields of education, including fashion designing, architecture, aerospace, automotive, shipbuilding, animation, advertising and many more. It has been a major driving force for research in computational geometry, computer graphics and discrete differential geometry.

Importance of Computer-Aided-Design (Cad) Training

CAD training in fashion designing help students draw, create woven textures, drape models to create patterns, adjust sizes and determine fabric colours. This technological aspect will enable students to understand a lot better and try various combinations in their design. Gould observes that the latest fashion computer technology is used not only to design fabrics and textile products, but also create prototypes using a digital design laboratory featuring digital textile printing, 3D body scanning and garment knitting.

1. CAD study makes the design process rapid and cheap. A design maybe created from the scratch using a stylus, with colours and textures from the large library of the system. Previous designs can be recalled and modified. It is also possible to produce an image from photographs which can be digitized and modified using different drapes and lights, state Carr and Pomeroy (1992).

2. The CAD software is used to increase the productivity of the design, improve the quality of design and improve communications through documentation and to create a database for manufacturing.

3. The budding designers are able to explore their creativity and innovation through the use of design software when they are taught in their colleges and higher education institutions.

4. The knowledge of computer-based design will help in creating more job opportunities for the students. It will create more study opportunities for aspiring design professionals.

5. Training of CAD in engineering provides a graphic simulation of how a constructed machine will function which is not possible through traditional teaching methods.

6. Computers allow designers to graphically test ideas in real-time without having to create real prototypes. It consumes less space and the digital tools are accurate.

7. The education of CAD also serves as a boon to the less intelligent students where they can compete with other students on a level, playing field.

8. CAD lowers product development costs and a greatly shortened design cycle.

9. Students can explore their drawing techniques and the possibility of scaling to a degree of accuracy that would never have been possible through manual drawing.

10. The knowledge of computer-aided design helps to present ideas clearly and professionally with accuracy. It is easy to investigate an error, diagnose the problem and solve it all using the software.

Conclusion

To recapitulate, design education requires a high level of visualization of the study process which is possible through digitalized learning. In higher education, designing has gone through phases from traditional to computerization only with the up-gradation of this skill training in the curriculum. Transformation of Design Education brought a drastic change with the use of these CAD software's which in turn has enhanced the quality of higher education for the design students in the country. The successful use of CAD technology is to provide the right technology to cater the upcoming demands of the industry and to avoid inadequate or irrelevant training. It can be concluded that applications of innovative educational and creative technologies in design education provide easier and more accessible learning of the study material, acquiring more knowledge in a short time, developing the student's creativity, visual thinking, and design skills.

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Women Empowerment through Skills Development and Vocational Training in Higher Education

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Abstract

Women's participation and empowerment are fundamental women's rights for enabling women to have control over their lives and put forth influence in society. Women often face discrimination and gender inequalities, with some women experiencing multiple discrimination and exclusion because of factors such as background or caste. This paper deals with skills development through vocational training along with various measures such as Pradhan Mantri Kausal Vikas Yojna, National Skills Development Corporation, National Skills Development Mission. Ministry of Labour and Employment has taken a number of initiatives in the field of skill development and employment. For instance, training of trainers, Vocational Training for girls is being conducted by Advanced Training Institutes and Regional Vocational Training Institutes run by the Ministry of Vocational Education and training are the essential mechanism of any strategy to improve farm and nonfarm productivity that improves rural incomes. Skill is the bridge between job and workforce. Women often have different training needs than men, sincethey are more likely to work as contributing family workers, subsistence farmers, home-based micro-entrepreneurs, or low-paid seasonal laborers, in addition to handling their domestic work and care responsibilities. Skills development is a key to improving household productivity, employability and income-earning opportunities for women and also for enhancing sustainable rural development and livelihoods.

Keywords: Women empowerment, Skills Development, Vocational Education, Sustainable rural development, Livelihoods, Employability.

Introduction

Women constitute about 48% of the totalpopulation of the country. According to India'sconstitution, women are legal citizens of the country and have equal rights with men. Because of the lack of acceptance from the male dominant society, Indian women suffer immensely. Women areresponsible for baring children, yet they are malnourished and in poor health. Women are also overworked in the field and complete the all of the domestic work. Most Indian women are uneducated. Vocational Training programme aim to provide skills and confidence to women from economically backward families and help them to achieve economic and social independence. Women have always been marginalized and relegated to the status of subjugated class in the Indiansociety. Due tolackof specificimplementation of plans, local communities especially women have remained outside the scope and benefits of

governmentschemesand programmes.Womenhavenot actively participated in their emancipation due to their lack of economic independence and illiteracy. There is a need to address the issue by raising the status ofwomen. The key lies in women empowermentthrough economic self-sufficiency and higherawareness levels on social, political and legal issues through mobilization. There is also a need to recognize and emphasize the diverse roles ofwomen such as reproductive, productive andcommunity management. Women should be organized and strengthened at the grass root level to end their subordination.

Skillsand knowledge are the engines of economic growth and social development of any country. Countries with higher and better levels of knowledge and skills respond more effectively and promptly to challenges and opportunities of globalisation. India is in transition to a knowledge-basedeconomy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more effectively.

Concept of Women Empowerment

Empowerment is the process of increasing the capacity of individuals or groups to make choices and to transform those choices into desired actions and outcomes. Empowerment of women means developing them as more aware individuals, who are politically active, economically productive and independent and are able to make intelligentdiscussion in matters that affect them.Women empowerment as a concept was defined asredistribution of social power and control of resources in favour of women. In its definition of wo men empowerment, the United Nations Development Fund for Women (UNDFW) includes factors such as (1) Acquiring knowledge and understanding of gender relations and the way in which these relations may be changed; and (2) Developing a sense of self-worth, a belief in one's ability to secure desired changes and the right to control one's life.

Women Empowerment in India

The Indian Constitution not only grants equality to women, but also empowers the State to adoptmeasures of positivediscrimination in favour of women sothat women can improve their livelihood. Within the framework of a democratic polity, our laws, development policies, Plans and Programmes have aimed at women's advancement in different spheres. From the Fifth Five Year Plan (1974-78) onwards there has been a marked shift in the approach towomen's issues from welfare to development and then from Eighth Five Year Plan emphasis was shifted from development to empowerment.Declaring 2001 as the Year of Women'sEmpowerment(Swashakti), theGovernment of India(GOI) passed the National Policy for the Empowerment of Women which has the goal to bring about the advancement, development and empowerment of women. TheNational Mission for Empowerment of Women (NMEW) was launched by the GOI with the aim to strengthen generally processes that promote all-round development of women. It has the mandate to strengthen the inter-sector convergence; facilitate the process of coordinating all the women's welfare and socio-economic development programmes across ministries and departments. One of the key strategies of NMEW is - investment in skill and entrepreneurship development, microcredit, vocational training and SHG development for economic empowerment of women. This finely conveys that mere imparting literacy would not be sufficient; the women need vocational training or skills also to be able to stand on their feet and be the earning members of the family. Women have been taking increasinginterest in recent years in income generatingactivities, self-employment and entrepreneurship that also lead to property rights, politicalrepresentation, social equality, personal right, family development, marketdevelopment, community development and at last the nation development.

About Women Labour

Women form an integral part of the Indian workforce. According to the information provided by the office of Registrar General & Census Commissioner of India, as per Census 2011, the total number of female workers in India is 149.8 million and female workers in rural and urban areas are 121.8 and

28.0 million respectively. Out of total 149.8 million femaleworkers, 35.9 million females are working as cultivators and another 61.5 million are agricultural laborers. Of the remaining females' workers, 8.5 million are in householdIndustry and 43.7 million areclassified as other workers. As per Census 2011, the work participation rate for women is 25.51 percent as compared to 25.63 per cent in 2001. The Work Participation Rate of Women has reduced marginally in 2011 but there is an improvement from 22.27 per cent in 1991 and 19.67 per cent in 1981. The work participation rate for women in rural areas is 30.02 per cent as compared to 15.44 per cent in the urban areas. In so far as the organized sector is concerned, in March, 2011 women workers constituted 20.5 percent of total employment in organized sector in the country which is higher by 0.1 percent as compared to the preceding year.   As per the last Employment Review by Directorate General ofemployment& Training (DGE&T), on 31st March, 2011, about 59.54 lakh women workers wereemployed in the organized sector (Public and Private Sector). Of this, nearly 32.14 lakh women were employed in community, social and personal service sector. In India, women often have limited access to education and to skills because of cultural norms about their role. Other sensitive groups are rural communities and people with disabilities, because of limited access to vocational education and training.

Scope of vocational training and skills development programme

Vocational Training programme is introduced toenhance livelihood opportunities of women who are at a disadvantageous position and have a scant exposure to technical skills and knowledge. The vocational training program for women aims to develop entrepreneurial skills among women.

Vocational Education in India

It is widely recognized that the 21st Century will be driven by knowledge, and a nation's competitive advantage in the global economy will be sustained by a focused and innovative education agenda. To meet the challenges of this century, many countries around the world, and more particularly newly independent developing countries, including India, set their mind on the expansion of educational systems and made heavy investment in education. There wasa growing realization thatavailability of educational opportunities to all sections of the society, irrespective of social status, class, caste, religion and gender, ensures non-discriminatory distribution of educational opportunities and socio-economic and political gains accruing from it. India's first Prime Minister Late Jawaharlal Nehru and the members of the Constituent Assembly responsiblefor framing the Indian Constitution (1950) sought to deal with the social and education al inequalitiesof illiteracy anddiscriminationby explicitly prohibiting discrimination in education onthe grounds of religion, caste, sex, race or birth. Current educational policy as related to structure and access is based on the objectives of the D.C. Kothari Commission, the recommendations of which form the basis of the 1968 National Policy on Education. The NPE (1968) called for a standard educational structure based on a 10+ 2+3-year model. The first Ten years were to be non-selective and provide a well-rounded general education available to all children. After the first ten years of general education the system would become highly selective and provide opportunities in both the academic and vocational streams. There are two commonly used terms in India for the vocational education system one is vocational education and other vocational training. Vocational education is referred specifically to vocational courses offered in school at the level of class 11 and 12 under a centrally sponsored scheme termed Vocationalization of Secondary Education. Vocational training on the other hand broadly refers to certificate level craft training and is open to students who leave school after completing anywhere from class 8-12. Programmes are offered under the Craftsmen Training Scheme (CTS) and operated by Industrial Training Institute (ITIs), Polytechnics and Industrial Training Centres (ITCs). This scheme falls within the purview of the Director General of Employment and Training (DGET), under the Ministry of Labour and Employment. (MOLE). The Vocational Education Programme (VEP) was started in 1976-77 under the programme of Vocationalization of Higher Secondary Education

in general education institutions. The National Working Group on Vocationalization of Education (Kulandaiswamy Committee, 1985) reviewed the Vocational Education Programmein the country and developed guidelines for the expansion of the programme. Its recommendations led to the development of the Centrally Sponsored Scheme (CSS) on Vocationalization ofSecondary Education which started being implemented from 1988.

National policy on skill development

To have broad framework towards sustainable development of trained and skill enriched human resources in India, a National Policy on Skill Development has been formulated by the Ministry of Labour & Employment. The objective is tocreate a workforce empowered with improvedskills, knowledge and internationally recognized qualifications to gain access to decent employment and ensure India's competitiveness in the dynamic Global Labour Market. It aims at increase inproductivity of workforce bothin the organizedand the unorganized sectors, seeking increased participation of youth, women, disabled and other disadvantaged sections and to synergize efforts of various sectors and reform the present system.

Vision for the National Skill DevelopmentInitiative in India

At present the capacity of skill development in India is around 3.1 million persons per year. The 11th Five Year Plan envisions an increase in that capacity to 15 million annually. India has target of creating 500 million skilled workers by 2022. Thus, there is a need for increasing capacity and capability of skill development programs. The skill development initiatives will harness inclusivityand reduce divisions such as male/female, rural/urban, organized/unorganized employment and traditional/contemporary workplace. The skill development initiatives support the supply of trained workers who are adjustable dynamically to the changing demands of employment and technologies. This policy will promote excellence and will meet the requirements of knowledge economy.

Prime Minister's National Council on Skill Development

Under the Chairmanship of Prime Minister hasbeen set up as an apex institution for policydirection and review. The Ministers for Human Resource Development, Finance, Industries, Rural Development, Housing and Urban Poverty Alleviation, Labour and Employment and Micro Small & Medium Enterprises are members. Deputy Chairman, Planning Commission, Chairperson of the National ManufacturingCompetitiveness Council, Chairperson of theNational Skill Development Corporation and 6 experts in the area of skill development are other members. Principal Secretary to the Prime Minister is the Member Secretary to the Council.

National Skill Development Co-ordination Board

A National Skill Development Co-ordination Board has been set up under the Chairmanship of Deputy Chairman, Planning Commission. Secretaries of Ministries of Human ResourceDevelopment, Labour and Employment, RuralDevelopment, Housing and Urban Poverty Alleviation and Financeare members. Chairperson/Chief Executive Officer of the NationalSkill DevelopmentCorporation, Secretaries of four States by rotation, for a period oftwo years,andthree distinguished Academicians / Subject Area Specialists are other members. Secretary, Planning Commission is Member Secretary of the Board.

Vocational Training for Women

Skill development for employability will be used as an agent of change in promoting women's employment. Women face a multitude of barriers in accessing skills and productive employment, remaining on the job due to effect of globalization or otherwise and advancing to higher level jobs, as well as returning to the labour market after a period of absence spent, for example, in raising children.

a) A policy of non-discrimination will be pursued vigorously to provide equal access for women to skill development and employment.

b) This Policy will aim toraise women's participation to at least 30% by the end of the 11th Plan.

c) Proactive measures that overcome barriers and facilitate participation, such as hostels forwomen, scholarships, transport, training materials and loans, will be made available on a large scale.

d) The Women's Vocational Training Programme will be expanded and the institutional network providing training facilities exclusively for women, so that they can obtain skills with high wage and self-employment potential will be greatly expanded.

e) In order to promote skills and employability of women, the sectors which employ a largenumber of women will be identified. These may includeconstruction,home-based traditional crafts or piece rate work, financial and health service as well as agricultural sectors.

f) Gender stereotyping in vocational courses will beeliminatedtoencouragewomen's participation in non-traditional occupations, including existing and emerging technological fields.

Skill development for the unorganized sector

Approximately 93 per cent of the country's workforce is in the unorganized sector. The sector cuts across all economic activities and includes rural and urban areas. It contributes to about 60 per cent of the country's GDP. Strengthening the skill base of the unorganized sector will improveproductivity, working conditions, labour rights, social security and living standards. Separate institutional mechanism will be explored which will inter-alia plan, implement and monitor the skill development efforts for the unorganized sector. The mode of informal apprenticeship and learning will be recognized and accommodated in the NVQF to help in horizontal and vertical mobility.

Conclusion

In spite of the huge task ahead with many intrinsic in skill development landscape in India at present, it is believed that the Government of India has been adequate attention on skilling the womenas perworld standards. The separate ministryfor skill development and Entrepreneurship schemesclearly gave the priory for skill development in India. The missions - Skill India and - Make in India shall come to exercise only when all the stakeholders concerned viz. government, training institutions, industry and more importantly, the women work hand-in-had under a structured format of design – develop – train – assess – certify – and place the skilled workforce as per the industry standards and aspirations of the women concerned. Further, accelerating entrepreneurship and self-employment is also crucial for large-scale employmentgenerationin India.Skill development initiative focusing on specific needs and challenges faced by growing entrepreneurs is the key to promote self-employment among the Indian women.

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Fostering Research and Innovation for Development of Nutritious Candy using Edible Coating

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Abstract

Institutions of higher education, fostering research and innovation play a central role in the advancement of societies and economies. They foster economic growth, strengthen technological progress, and enhance job creation amongst students. Not only it equips to work as development experts, analysts and researchers; doctoral studies and pursue of an academic career can also be continued. Through this support and study, is a new technology is researched in field of filmogenic solution where gelatin along with glycerol was used to encapsulate the candies; made from naturally derived and nutritious raw materials like cranberry, banana, dates and nuts; aided by chocolates (dark and white); expressing their ability to preserve product for longer duration i.e. to extend shelf life, prevent oxidation, retain colour, flavour and texture and to enhance the glaze of product (Crampton, L; 2019). Moreover, these layers are transparent and edible, perfect for coating.

Keywords: *Higher education, Job creation, Edible, Gelatin, Candy, Shelf life, Quality.*

Introduction

To address the multiple challenges faced by the Indian system of higher education,range of reforms have been instituted in an attempt to meet the growing demands of students for higher education and promote greater equality of educational access and opportunity, and to address the issues of academic quality and research performance is one such opportunity provided to students.

Higher education plays an important role in promotion of creativity, innovation, and entrepreneurship.

1. **Creativity**: creativity results from three qualities– expertise, motivation, and imaginative thinking – that are possessed by a single individual. Without motivation, a creative thinker is unlikely to have the persistence required to solve a problem requiring knowledge and a willingness to challenge accepted wisdom. A lack of expertise incapacitates motivation and imaginative thinking. Here comes the role of teacher who motivates and helps gain expertise and promoting imaginative thinking.

2. **Innovation**: Individuals working within higher education have a multitude of opportunities to implement their creative research. Woodman, SawyerandGriffin (1993) define organizational creativity as "the creation of a valuable, useful new product, service, idea, procedure or process by individuals working together in a complex social system" . This definition depicts creativity as the development of something novel by a group, rather than as the product of an individual working in isolation. Indeed, creativity may be enhanced through social interaction.

3. **Entrepreneurship**: It is becoming a more frequently-employed concept within higher education. Entrepreneurship is more focused on the marketization of an innovation. Entrepreneurship's "defining trait is the creation of a novel enterprise that the market is willing to adopt. It thus entails the commercialization of an innovation supported higher education institute (Tierney, W; 2016)

One such project untaken involving creativity, innovation and desire for venturing is creation of edible gelatin coated nutritious candies.

Edible coating is new environment friendly technology that is applied to control moisture transfer, gas exchange or oxidation processes. Edible coatings provide an additional protective coating to product (Dhall, RK;2013). It positively affects physical (moisture retention, glossiness, appearance, firmness) and biochemical attributes (cell wall degrading enzymes, oxidation) and acts as replacement for plastic wrappers.

Gelatin is an important biopolymer derived from collagen and is extensively used by various industries. Gelatin is a mixture of proteins and peptides obtained from the partial breakdown of collagen (Ramos, M; 2016).

Candy is generally described as a broad category of sweet foods, also referred to as "confections." Hard and soft candies, chocolate, and gum all contain sweeteners such as sugars, syrups, honey, or non-nutritive sweeteners (Hornick, B; 2014).

Nutritional content, its properties were major deciding factor for raw material of candy.

Nutritional value

With base as **nuts** (almonds, Cashews and Peanuts) which are good sources of fat, fiber and protein. Most of the fat in nuts is monounsaturated fat, as well as omega-6 and omega-3 polyunsaturated fat. However, they do contain some saturated fat. Nuts also contain vitamins and minerals, including magnesium and vitamin E (Robertson, R; 2018).

Banana is an edible fruit – botanically a berry – produced by several kinds of large herbaceous flowering plants. Bananas are a healthy source of fiber, potassium, vitamin B6, vitamin C, and various antioxidants and phytonutrients (Arnarson,2019).

Dark chocolate is rich in minerals, such as iron, magnesium, and zinc. The cocoa in dark chocolate also contains antioxidants called flavonoids, which may provide several health benefits like Reducing blood pressure (by flavanols), reduce cholesterol (using polyphenols), has anti-inflammatory effect, can also reduce insulin resistance (Eske, J; 2019).

Objectives of developing edible gelatin coated candy:

To prepare edible wrapper which is cost effective and acceptable which will help in extending shelf life of product; along with avoiding moisture loss?

Methods and materials

Institution provides this opportunity by supplying of materials (equipment) and methods (mostly include knowledge).

- For edible gelatin layer: Thermometer, ph. Meter, burner, setting plate etc. were used to make the layer.

- For candy making: For candy to be standardized and evaluated. Base of each candy included naturally derived raw material like banana. Efforts were made to develop a candy infused with nutrients and new to market.

It involved using double boiler method for chocolate melting to compressing of hot banana mixture to shape candy.

Banana candy

- Gelatin coated candies: Apt knowledge and guidance of prevailing temperature and moisture content ensures the success of product, so that gelatin adhere to the candy.

- Knowledge of Sensory evaluation testing: Candy was selected to be coated with edible layer by sensory evaluation (involving appearance, flavour, taste, texture and colour) which is included in study of nutrition evaluation. The sensory evaluation consists of judging the quality of food by panel of judges. A panel of judges consisted of 3 lecturers and 5 students of Government Home Science College, Chandigarh, India. Acceptability and sensory scoring of the recipe was done on the basis of the scores given by the judges based on Hedonic scale rating (ranging from like extremely to dislike extremely).

Results

Gelatin coated banana candy was approved based on its overall acceptability(through sensory evaluation) keeping in mind the taste, texture, color, flavor after it wasstored for some time (roughly 1 month). Success of one's innovation promotes more and more students to become self-sufficient and propel entrepreneurship.

Conclusion

Universities, colleges, and research agencies have structures and processes in place, along with leadership system empowering both students and staff which helps in pursue of innovative ideas; which has led to the successful development of gelatin based nutritious candy. This research and development have paved way for entrepreneurial environment, that encourages people to take calculated risks, that is tolerant of failure, and that focuses more on the long-term process of moving the organization forward rather than on short-term outcomes.

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The Role of Higher Education in Empowering Indian Women

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Abstract

Knowledge is the life of every Indian woman. It results in the experience that she gains from the environment and the supporting world around her, which allows her to live as knowledgeable productive members of the society. The homely environment with a mother's love is the first source of learning for the child a and an educated mother would create an environment, allowing her children to gather and analyse information, which helps in adapting to a bigger society in the future. Critical thinking and analysis will make children better members of society. To educate someone is to deliberately teach them something new and higher education for women is the most powerful means to evolve through/beyond the current economic and social crisis in India and to teach her children the art of thinking and analysis before entering the school for education. Higher education is the gateway to economic security and opportunity particularly for women in India. Women are part of the socio-economic system and they uphold rich cultural and traditional values. Their progress is equated with the progress of the nation. From 2000, many Indian women play a major role in Knowledge Societies as leaders, addressing issues on creating and adapting information and ideas at an accelerating speed to support economic growth and improved quality of life in India addressing issues such as Equity, Quality, Relevance, and Access, proving that Indian women with any background becomes a contributing member of society through learning. The Indian Government has introduced policies and procedures with the goal of sensitizing the higher education system, recognize gender equity and increasing the number of women enrolling for higher education. Higher education for women in India has witnessed impressive growth over the years and the Government is pooling resources needed to promote female education at all levels.

Keywords: *Empowerment, Knowledge, Higher education, Learning, Women*

Introduction

Women constitute around 48% of the total population of India. Equity in education especially gender equity was one of the major issue in India and there has been a tremendous growth in women enrolling for higher education since independence (risen to 42%) , reducing the gender gap in higher education. 14.72% women have enrolled in professional courses and the highest being in Goa and the lowest in Bihar. Formulating and implementing stringent and powerful laws and policies have addressed the malice

of gender discrimination of Higher Education. Most Indian women, with the possibility of economic independence, through respectable employment, have becomes an important earning member of the family. Higher education leads a woman to "Complete living" with:

- Self-confidence
- Necessity of life
- Family welfare
- Involvement in Social and political activities
- Complete Living

The higher education helps women to be mentally and emotionally stronger and to face challenges and overcome obstacles in life and to be a complete woman.After independence various commissions and committees set up in India advocated its need for gender parity in all the stages of education. Kothari commission and the national policy on education and the programme of Action in 1992 put enormous emphasis on promotion of gender equity in education by reducing the gender gap in access, retention and transition from one stage to other. The national policy on education stressed that education will be used as an agent of basic change in the status of women. In order to neutralized the accumulated disadvantages of the past. The national policy for empowerment of women has been a remarkable achievement for women. The year 2001 was celebrated as women's empowerment year, which recognized women as agents of socio-economic change and development in the country. Indian Government continues to encourage higher education for women through programmes like, Indira Gandhi scholarship for single girl child for pursuing higher and in order to support higher education through scholarships and by constructing women hostels and by capacity building for women managers in higher education.

To improve the Social Group Equity, Government of India had Established Equal Opportunity Cells (EOC) for SC/ST/ OBC/Minorities. The UGC has assisted institutions to establish "Equal opportunity Cells" to oversee the effective implementation of policies and programmes for disadvantaged groups and to provide guidance and counselling in academic, financial, social and other matters. The Cell would also take up programmes to sensitize University/ Colleges on problems faced by Scheduled Caste (SC) and Scheduled Tribe (ST) categories in higher education. Indian Government has also introduced Post-Doctoral Fellowship for SC/ST and Women and Post-Graduate   Scholarships for SC/ST students in professional courses. The Udaan program of the CBSE is dedicated to the development of girl child education, so as to promote the admission of girl students. About 951 students have been selected by the CBSE. The aim is to address the teaching gap between school education and engineering entrance examinations. It seeks to enhance the enrolment of girl students in prestigious technical education institutions through incentives & academic support. It offers free online supplementary lessons in physics, chemistry and maths specially prepared in the form of videos, text and practice tests on a tablet.

 PRAGATI - Scholarships for Girl Child for Technical education aims at providing encouragement and support to girl child to pursue technical education. The scheme envisages providing a scholarship of Rs. 30000 and tuition fees Rs. 2000 for 10 months until the duration of the course. 4000 girls will be benefited every year with the restriction that only one girl per family with income less than 6 lakhs/annum will be considered. The Candidates will be selected on merit through the qualifying examination of the State.

The dropout ratio at various levels of education for girls is much higher than that of boys. Keeping Swami Vivekananda's ideas of women education and to promote girls education, UGC has introduced the Swami Vivekananda Scholarship for Single Girl Child for research in Social Sciences with an aim to compensate direct costs of higher education especially for such girls who happen to be the only girl child in their family. Possible reasons for Indian women opting for Higher Education:

- Encouragement by Government and Society
- Ability to combine studies and work with family life
- Decreasing discrimination against girls in families
- Higher preparation for higher education, (evidenced by the scores in secondary education)
- Higher aspirations to obtain tertiary degrees.

In the words of Mahatma Gandhi, "If you educate the man, you educate the person but if you educate the woman, you educate the nation". One of the most significant transformations in education in India over the past several decades is the drastic increase in women's access to colleges and universities. Formulating and implementing stringent and powerful laws and policies have addressed the malice of gender discrimination of Higher Education. Most Indian women, with the possibility of economic independence, through respectable employment, have becomes an important earning member of the family. An educated woman has the skills, self-confidence and the power to be a better citizen. Women have all the power and capacity as that of men and they are manifesting themselves amongst different opportunities provided through higher education. To educate someone is to deliberately teach them something new and higher education for women is the most powerful means to evolve through/beyond current economic and social crisis in India and to teach her children the art of thinking and analysis before entering the school for education. Higher education is the gateway to economic security and opportunity particularly for women in India.

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Perceptionof Students Studying in Higher Education Institutes towards Ensembles Worn by their Teachers

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Abstract

The purpose of the study was to determine the influence of the ensemble of the teachers on the perception of students based on the educational qualification of their parents. A 25 item structured questionnaire was established for the study and data was collected from 360 college students of four Girls Colleges of Chandigarh. Descriptive statistics and ANOVA were used for analyzing the data. The study revealed that the educational qualification of the father of the student has a significant impact on their perception based on the ensemble of the teachers although the qualification of the mothers showed no influence on students' perception.

Keywords:Teacher's Ensemble,Higher Education,Student's Perception, Parental Education

Introduction

Every costume tells a different story. Intentionally or unintentionally, one's ensemble communicates lot more than it is expected to.Clothing is a nonverbal tool, an expression of who we are. Dress codes symbolize cultural values regarding sexual identity, differentiating authority, role and status. (Morris, 1996).Thus clothes have evolved from being a basic necessity to a social identification as it influences one's perceptionabout how they perceive themselves or how they want to be perceived and to express their personalities and social status.

Teaching professionals today are expected to engage students and motivate them to take an active role in their own learning thereby leaving the academic institutions feel pressured to ensure that their teacher imparts what students expect. Teachers play a very vital role in student's life. A teacher is someone whom students look up to and get influenced by **(Bakshi, 2019)**. Teachers help in shaping the cultural and behavioral norms for students, of which professional dress is one. Thus the significance of this study lies in the fact that this research will throw light on influence of the ensemble of the teachers on perception of students based on educational qualification of their parents.

Objectives of the Study:

1. To determine the influence of teacher's ensemble on the perception of students based on their father's educational qualification

2. To determine the influence of teacher's ensemble on the perception of students based on their mother's educational qualification

Hypothesis of the Study

H_1: Educational qualification of fathers of the students has a significant influence on student's perception based on the teacher's ensemble H_2: Educational qualification of mothers of the students has a significant influence on student's perceptionstudents based on the teacher's ensemble

Delimitations of the study

- The study was delimited to girls' colleges of Chandigarh.
- The study was delimited to opinion about only female teachers of the colleges of Chandigarh.

Research design

Sample of the Study:

The sampling was done in two steps. Since the study was delimited to Girls colleges of Chandigarh, therefore, out of three government and three private girls colleges in Chandigarh, two were picked up proportionately from both government and private colleges and student from these were made to respond to the questionnaire. In the first step, quota sampling was applied since ratio of government and private colleges were maintained. Within these colleges, then random sampling method was adopted to get questionnaires filled from 360 students. 30 students from each year were taken- From First, Second and Third Year of degree respectively. These were all undergraduate course students only.

Tools Used in the Study:

The data was collected using a 25 items questionnaire developed by the researcher that included questions related to the personal profile of the respondents, like name, contact details and demographic variables of age, education, family's educational qualificationandPerception of Students about their Teachers based on the Ensemble Worn by them.

Statistical Tools Used in the Study:

The data that was collected from the respondents was analyzed by calculating mean and ranks andANOVA using SPSS software.

Data Presentation and Interpretations

Table 7.1 Educational Qualification of Fathers (of respondents)

Educational Qualification (Fathers)	Percent
Class 10	13.1
lass 12	23.6
Graduate	41.4
Postgraduate	20.6
Doctorate	1.4
Total	100.0

Table 7.1 show that out of total respondents, majority of fathers of respondents were graduates (41%), 24% were Class 10 qualified, and 21% were Postgraduates. Further 13% had cleared their Class 12 and just 1% held a Doctorate degree.

Table 7.2: Educational Qualification of Mothers (of respondents)

Educational Qualification (Mothers)	Percent
Class 10	23.9
Class 12	18.1
Graduate	31.1
Post Graduate	25.6
Doctorate	1.4
Total	100.0

Table 7.2 show that out of total respondents, mothers of maximum students, 112 in total (31.1%) were Graduates, 92(18.1%) of them were Postgraduates, 86(23.9%) of them had qualified Class 10 examination, 65(18.1%) had cleared Class 12 examination and only 5(1.4%) of them had Doctorate degrees.

Table 7.3: Student's Perception of Teachers Wearing Formal Ensemble

Item No.		Strongly disagree N(%)	Disagree N(%)	Neutral N(%)	Agree N(%)	Strongly agree N(%)	Mean	Rank	Chi-square value	Df	p-value
1	teacher is influential	6(1.7)	5(1.4)	38(10.6)	112(31.1)	199(55.3)	4.37	R3	385.1	4	0.00**
2	teacher is confident	0(0)	5(1.4)	22(6.1)	101(28.1)	232(64.4)	4.56	R1	357.0	3	0.00**
3	teacher is superior	0(0)	29(8.1)	101(28.1)	103(28.6)	127(35.3)	3.91	R9	59.8	3	0.00**
4	teacher is dominant	14(3.9)	85(23.6)	128(35.6)	65(18.1)	68(18.9)	3.24	R16	93.5	4	0.00**
5	teacher is fair	3(0.8)	43(11.9)	101(28.1)	97(26.9)	116(32.2)	3.78	R11	125.1	4	0.00**
6	teacher is dedicated	5(1.4)	23(6.4)	38(10.6)	122(33.9)	172(47.8)	4.20	R6	290.7	4	0.00**
7	teacher is reliable	2(0.6)	44(12.2)	102(28.3)	102(28.3)	110(30.6)	3.76	R12	124.0	4	0.00**
8	teacher is strict	2(0.6)	31(8.6)	103(28.6)	127(35.3)	97(26.9)	3.79	R10	155.4	4	0.00**
9	teacher is enthusiastic	15(4.2)	23(6.4)	77(21.4)	98(27.2)	147(40.8)	3.94	R8	166.3	4	0.00**
10	teacher is approachable	38(10.6)	135(37.5)	89(24.7)	66(18.3)	32(8.9)	2.78	R17	97.9	4	0.00**
11	teacher is organized	2(0.6)	17(4.7)	19(5.3)	107(29.7)	215(59.7)	4.43	R2	450.1	4	0.00**
12	teacher is experienced	0(0)	18(5)	72(20)	52(14.4)	218(60.6)	4.31	R4	259.3	3	0.00**
13	teacher is motivating	15(4.2)	15(4.2)	59(16.4)	71(19.7)	200(55.6)	4.18	R7	320.2	4	0.00**
14	teacher is friendly	32(8.9)	201(55.8)	113(31.4)	6(1.7)	8(2.2)	2.33	R19	394.1	4	0.00**
15	teacher is well prepared for class	8(2.2)	24(6.7)	19(5.3)	131(36.4)	178(49.4)	4.24	R5	332.3	4	0.00**
16	teacher appeals to you	21(5.8)	29(8.1)	111(30.8)	91(25.3)	108(30)	3.66	R13	105.9	4	0.00**
17	teacher is same as you	24(6.7)	202(56.1)	122(33.9)	4(1.1)	8(2.2)	2.36	R18	422.6	4	0.00**
18	teacher is attractive	0(0)	80(22.2)	112(31.1)	68(18.9)	90(25)	3.38	R14	81.2	4	0.00**
19	teacher is close to you	39(10.8)	233(64.7)	71(19.7)	9(2.5)	8(2.2)	2.21	R20	487.2	4	0.00**
20	teacher has high status	32(8.9)	43(11.9)	133(36.9)	81(22.5)	71(19.7)	3.32	R15	86.7	4	0.00**

Table 7.3 shows a significant relationship between (p<0.01) a teacher's formal ensemble and perception of students at 0.01 level of significance. It is evident from the table that the mean value is maximum for Item 2 ($\bar{X}$=4.56), followed by Item 11 ($\bar{X}$=4.43) and Item 1($\bar{X}$=4.37). It can be said that a larger number of students rated the factors of teacher's 'confidence', 'organized' and 'influential' higher in ranks when a teacher comes dressed in a formal ensemble.

Table 7.4: Student's Perception of Teachers Wearing Casual Ensemble

Item No.		Strongly disagree N(%)	Disagree N(%)	Neutral N(%)	Agree N(%)	Strongly agree N(%)	Mean	Rank	Chi-square value	df	p-value
1.	teacher is influential	21(5.8)	115(31.9)	182(50.6)	17(4.7)	25(6.9)	2.75	R17	228.6	4	0.00**
2.	teacher is confident	11(3.1)	256(71.1)	63(17.5)	5(1.4)	25(6.9)	2.38	R19	342.3	4	0.00**
3.	teacher is superior	3(0.8)	170(47.2)	153(42.5)	9(2.5)	25(6.9)	2.68	R18	250.9	4	0.00**
4.	teacher is dominant	19(5.3)	46(12.8)	91(25.3)	97(26.9)	107(29.7)	3.63	R7	376.4	4	0.00**
5.	teacher is fair	7(1.9)	51(14.2)	140(38.9)	77(21.4)	85(23.6)	3.51	R11	79.1	4	0.00**
6.	teacher is dedicated	4(1.1)	44(12.2)	119(33.1)	107(29.7)	86(23.9)	3.63	R7	131.7	4	0.00**
7.	teacher is reliable	40(11.1)	200(55.6)	88(24.4)	29(8.1)	3(0.8)	2.32	R20	125.5	4	0.00**
8.	teacher is strict	4(1.1)	80(22.2)	89(24.7)	94(26.1)	93(25.8)	3.53	R10	337.1	4	0.00**
9.	teacher is enthusiastic	4(1.1)	17(4.7)	25(6.9)	144(40)	170(47.2)	4.28	**R2**	82.0	4	0.00**
10.	teacher is approachable	2(0.6)	16(4.4)	11(3.1)	156(43.3)	175(48.6)	4.35	**R1**	138.1	4	0.00**
11.	teacher is organized	7(1.9)	121(33.6)	114(31.7)	66(18.3)	52(14.4)	3.10	R14	616.1	4	0.00**
12.	teacher is experienced	4(1.1)	40(11.1)	130(36.1)	98(27.2)	88(24.4)	3.63	R9	122.6	4	0.00**
13.	teacher is motivating	24(6.7)	85(23.6)	184(51.1)	27(7.5)	40(11.1)	2.93	R16	153.9	4	0.00**
14.	teacher is friendly	0(0)	22(6.1)	18(5)	182(50.6)	138(38.3)	4.21	**R3**	29.0	3	0.00**
15.	teacher is well prepared for class	19(5.3)	75(20.8)	83(23.1)	117(32.5)	66(18.3)	3.38	R13	153.9	4	0.00**
16.	teacher appeals to you	26(7.2)	42(11.7)	28(7.8)	125(34.7)	139(38.6)	3.86	R4	69.4	4	0.00**
17.	teacher is same as you	0(0)	57(15.8)	78(21.7)	126(35)	99(27.5)	3.74	R6	170.1	4	0.00**
18.	teacher is attractive	2(0.6)	79(21.9)	143(39.7)	45(12.5)	91(25.3)	3.40	R12	408.6	4	0.00**
19.	teacher is close to you	6(1.7)	138(38.3)	111(30.8)	46(12.8)	59(16.4)	3.04	R15	14.8	4	0.01**
20.	teacher has high status	2(0.6)	5(1.4)	107(29.7)	196(54.4)	50(13.9)	3.80	R5	302.6	4	0.00**

** Significant at 0.01 level

The above Table 7.4 shows a significant association (p<0.01) between teacher's casual ensemble and its effect on student's perception at 0.01 level of significance. The mean value is maximum for Item 10, ($\overline{X}$=4.35), followed by Item 9 ($\overline{X}$=4.28) and Item 14 ($\overline{X}$=4.21). It can be said that a larger number of students rated the factors of teacher's 'approachability', 'enthusiasm' and 'friendly' nature higher in ranks when a teacher comes dressed in a casual ensemble.

Table 7.5: Comparison of Mean of the Influence of Formal and Casual Ensemble of Teachers on Student's Perception (based on education of student's father)

	10th		12th		Graduation		Post graduation		Doctorate		F-value	p-value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Formal score	70.55	6.94	71.65	7.01	73.23	7.15	74.08	6.19	81.40	1.34	6.28	0.00**
Casual score	65.62	7.36	66.58	8.57	68.25	8.11	68.66	8.93	74.00	4.47	2.72	0.03*

**Significant at 0.01 level and *Significant at 0.05 level

The above table indicates that the significant mean difference was obtained for Formal Ensemble (F=6.28, p<0.01), Casual Ensemble (F=2.72, p<0.05).

Discussions Mean values indicatedthat the student whose father was highly educated ($\overline{X}$=81.40) feels that formal ensembles plays an important role in impacting the perception of students whereas this perception decreases with a decrease in the qualification level of student's father as the mean value is least for student whose father is educated up till 10th standard only.

Similar is the case with the impact of casual ensemble as the mean value is highest for father of the student who is highly educated and is least for the student whose father has minimum qualification that is up to 10th grade only. This indicates that student whose father is highly educated ($\overline{X}$=74.00) feels that casual ensembles plays an important role in impacting the perception of students whereas its vice versa for the student whose father has least education.

Hence, H_1: Educational qualification of fathers of the students has a significant influence on student's perception based on teacher's ensemble is accepted.

Table 7.6: Comparison of Mean of the Influence of Formal and Casual Ensemble of Teachers on Student's Perception (based on education of student's mother)

	10th		12th		Graduation		Postgraduation		Doctorate		F-value	p-value
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Formal score	72.48	7.34	72.34	7.01	72.88	6. 68	72.96	6.45	77.60	6.66	0.75	0.56
Casual score	66.14	8.76	66.26	7.54	68.62	8.19	67.92	8.12	68.40	4.98	1.56	0.18

**Significant at 0.05 level

The above table indicates that no significant mean difference was obtained for influence of formaland casual ensemble of teachers on student's perception based on the educational qualification of their mothers as p>0.05.

Hence, H_2: Educational qualification of mothers of the students has a significant influence on student's perception based on teacher's **ensembleis rejected.**

Conclusions

The study revealed that the ensemble of a teacher plays a pertinent role in influencing a student's perception. The students associate the characteristics of confidence, organized and influential to a teacher when she is dressed in formal ensemble while the characteristics of being more friendly, close to students were mostly associated with teachers when they wear casual ensemble. In addition to this, the study revealed that this perception of students tends to increase with an increase in the educational qualification of the fathers of the students. In other words, it can be said the more educated the father of the child is the higher is the impact of the ensemble on the perception of the students based on the ensemble of the teachers. Whereas no significant influence of teacher's ensemble was found on student's perception based on the educational qualification of student's mothers.

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Higher Education Shapes Future Economy through Sustainability: The Clothing Swap

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Abstract

Sustainability in the fashion faces an uphill climb. The fashion industry produces about 10 percent of the world's carbon emission and is the second -largest consumer of the world's water supply. Reuse therapy is an idea that opposes fast fashion and tries to make an individual value the clothes one has. Still fashion conscious overspend once they walk into boutique or a consignment shop, whether they need the items or not. By swapping clothes, one can, not only reduce the number of natural resources needed to produce new garments, but also increase the lifespan of these products. A clothing swap is a type of swap meet wherein participants exchange their valued but no longer used clothing, accessories and jewelry for the items they will use. clothing swap gives the various solutions like stay out of malls, stay off the internet and stay away from the buy-one-get one deals. Reasons , one love to swap, perhaps even more so than shopping are, they save for not going out of hard cash, trying on clothes in stores are stressful, if not liked there is a freedom to choose from next swap, getting rid of items which do not fit anymore ,and what you don't claim will go to local nonprofit. Tips for hosting the swap includes: start small, choose the invitees, give the detailed instructions in the invitation, set up your home for the swap, organize the display and run through quick rules.   If the first swap goes well, a clothing swap might become the regular event between you and your friends. Social media viz. face book, instagram , whatsapp, linkedin, twitter, messenger etc. can bring revolution in this antecedent. Inspiring case studies give insight of the clothing swap experiences.

Keywords: *Fashion, Sustainability, Clothing Swap*

Introduction

Clothing swaps have long been a favorite way for environmentally-minded and budget-conscious people to recycle clothes. Global Fashion Exchange was founded by the Danish Fashion Institute in 2013, and the first event took place during Danish Fashion Week. If the number of times a garment is worn is doubled, on average, its Carbon footprint would be 44 per cent lower. According to Dhawal Mane, The concept is pretty simple: anyone can participate by bringing garments they no longer wear. Fashion bloggers facilitate the participants who can trade the most valuable pieces one-for-one. Clothing swap culture has its own rules and procedures for facilitating exchange among small groups of friends gathered at someone's home, at public venues and also on the online swap environment.

Organizing Clothing Swap: Start small,   give your friends detailed instructions in the invitation, Set up your home the day of the swap, Use the first half-hour or so for display only, Run through a few quick rules, Have fun! This means don't let the stress of hosting keep you from shopping.

Clothing swap: Case studies/events

Margaret Badore (September 16, 2014). Global Fashion Exchange was hosted at NeueHouse in Manhattan. It was founded in 2013 by Eva Kruse, CEO of the Danish Fashion Institute. "I am fashion, but we need to look into how we can do it with less harm to the planet."According to the Environmental Protection Agency, Americans generated 14.3 million tons of textile waste in 2012. Getting a longer life from the clothes we already have is an important step towards more sustainable fashion.

Clothes swaps and second-hand sales become trendy in Indian cities

Started in 2016 by Nancy Bhasin and Vaybhav Singh with swap parties in Delhi and NCR, This for That, in September 2018 transformed into an app-based platform for women across India to swap fashion and beauty products. So far, 25,000 people have downloaded the app and 4,000 to 5,000 people use it monthly. The whole point is to make sustainability palatable. How it works: Sign up on the app via Face book. All items are uploaded with photos by individual users; each product is checked by This for That. Next, hit the swap button and the app will provide suggestions on products that you may like. In order to match the value of an item you liked in someone's closet, you can offer more than one item in return. This for That app is available on Play Store and the App Store. It offers doorstep pickup and drop-off across India. Shipping charges apply.

Bengaluru

Dhawal "Clothes swap is a popular western concept," says Dhawal, who works with a clothing brand as a sustainability specialist. He is working in collaboration with a US-based organization called Global Fashion Exchange (GFX), a not-for-profit global movement. The goal of GFX was to swap 5, 00,000 kgs of clothing in 2018." However, most of these clothes, that people tend to throw away, that they can now exchange, the event, which was at Lahe Lahe, Indiranagar, Bengaluru was held simultaneously in other cities including Miami, Sydney, NYC and Copenhagen. Green Stitched has conducted eight events in Bengaluru and one in Mumbai in partnership with Fair Trunk. So far, 300 people have participated and over 800 items have been swapped," says Dhawal. How it works: Entry costs Rs.100 per person. Participants can bring up to 10 pieces of clothing to the venue on the day of the swap. For each approved item, you receive a coupon that can be exchanged for another item. For details, log onto www. visitgreenstitched.com

In July 2014, four friends had the idea for Exchange Room, an eco-friendly wardrobe-swap initiative. The community that started with 10 participants now has 1,670 Instagram followers. According to co-founders Sai Sangeet Paliwal and Prithvi Rao, the last event held on September 29, saw over 1,200 items changing hands with over 100 participants in just four hours. **How it works:** As a swapper, drop off the items, points are allocated for each item based on variables such as fashionability and quality. Purchase the item using your points or use cash if you have run out of points. For details, check out their Instagram or Face book page.

Chennai

Veena Balakrishnan, co-founder of eco-friendly retail brand Everwards, is pushing this trend in the city, says, "There is a lot more demand for giving than buying. At most 10% of the clothes we get end up being sold."Everwards is pricing the pre-loved clothes at about 10% of MRP, even the ones that still have tags attached. Most of their items comprise tops and jewellery and saris. These usually attract about 150-200 people. For updates on future sales and how to donate, follow the Everwards India Instagram page.

Hyderabad

Eco Bazaar in Hyderabad, an initiative by Nidarshana Saikia Das and Aruna Nayagam, featured children's toys and books, while earlier this month it was saris and accessories and menswear next month," says

Nidarshana. What is left behind is given to Goonj, an NGO. Eco Bazaar as a whole saw a footfall of 300 in October. **How it works:** Disha Collective clothes swap (follow their Face book page for details), pay Rs.100 at the entrance. Exchange your clothes for tokens after volunteers have checked them for quality. The number of tokens you have equals the number of items you can take.

A student, who attended the recent event in Pune, says, "I think it is a wonderful idea to exchange things without money being involved, and then reusing them. It's a truly circular economy, which is furthering sustainability."

Amit Pathak

Nisha Saraf, a designer, try to include sustainability, give away things I don't use and get amazing clothes in exchange. I gave about 14 clothes, and got eight in return."

Nisha Saraf

"A clothes swap is a fun way to exchange clothes. It's essentially a barter system that ensures a longer life for good quality clothing through reusing and re-purposing. It's a model that has worked successfully in the metropolitan cities in India as well as abroad,"

Tanwi Mirajkar

As trends change, people want to keep up with the changes. The problem is that as you are accumulating more clothes, so, I feel clothes-swapping events are a very good platform for those people to get rid of 20 per cent of their unused clothes
Doni Mehta, owner of a laundry service

A 24-year-old student, a shopaholic, would just blindly buy clothe. I found out that the production of distressed jeans − require chemical dyes, which is terrible for the environment, which poses serious health risks to the workers, the chemical run-offs from some of these manufacturers, turning water systems into indigo-blue − as in the case of the Pearl River in China. The information really hit me hard. "Since then, I get all my new clothes from clothes swaps − in different Indian cities and abroad − and ensure I give away the ones I don't use,"

Sapna.

Conclusion

There's a new way to recycle and declutter your closet and find great deals on stylish clothing. Clothing exchange events have become more and more prevalent both in person and online, and are particularly popular among female consumers. These events are often referred to as "clothing swaps," and allow participants to swap their gently used clothes, accessories, and shoes with others.

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Indian Universities Ranking by the Times Higher Education World University, 2020 – A Data Representation

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ABSTRACT

The world has realized that the economic structure of a country is determined by their education systems. A developed nation is inevitably an educated nation. To make higher education system much better, it needs greater transparency and accountability and the role of colleges and universities in the new millennium. According to The Times Higher Education rankings, not even a single Indian university stands in the top 100. Six institutes among the top 500 in this year's Times Higher Education World University rankings 2020 as against five in the 2019 rankings. IISc, the top most Indian university as per The Times Higher Education Rankings, stood at 300-350 bracket. To understand why Indian universities performed poorly, it is important to understand the ranking mechanism. The Times Higher Education ranks universities on the basis of 8 parameters: Teaching, Research, Citations, Industry Income, International outlook, Student: staff ratio, Female: male ratio, International student ratio. Most of the best Indian institutions are generally get their position in scoring good in a teaching environment and industry income but they perform poorly in international outlook compared with both regional and international counterparts. Overall, seven Indian universities are covered in the lower band in 2020, while many of the countries' institutions remained stable on their place but there are a few institutes that have moved up in the rankings like IIT Delhi, IIT Kharagpur, JamiaMiliaIslamia.

Keywords: The Times Higher Education Rankings, Regulation in Indian Higher Education

Introduction

The Times Higher Education World University Rankings of 2020 incorporates right around 1400 colleges across 92 nations, remaining as the biggest and most various college rankings ever to date. IIT Ropar made an unexpected section and takes the main spot among Indian colleges nearby IISc Bangalore. College of Oxford, United Kingdom positioned first on the planet positioning 2020. QS rankings depend on scholastic notoriety (40%), business notoriety (10%), staff understudy proportion (20%), references per personnel (20%), and global workforce/worldwide understudies (10%). The principle administering body at the domain level is the University awards commission which upholds its benchmarks, exhorts

the legislature and helps facilitate between the Center and the state.

The Indian colleges failed to meet expectations enormously with regards to universal understudy proportion. For each 100 Indian understudies there is just 1 worldwide understudy in Indian colleges. Oxford, in the interim has a great number for: 41%. The other issue is the quantity of global workforce. This together with the worldwide understudy proportion, compensates for a bleak positioning school in global viewpoint parameter. Another large issue in Indian colleges is investigate. The exploration is unduly underfunded. The assorted variety in look into is likewise inadmissible as the greater part of the examination is concentrated. therefore, the references of Indian colleges charge consistently falls against the instructive awards. In the event that we take a gander at scholastic notoriety and the workforce understudy proportion, we can see where a large portion of the colleges in India stand. Scholarly notoriety as portrayed in the QS positioning depends on educating and research. Educating and research in any college relies upon the nature of staff just as the nature of understudies. The nature of educating relies upon the nature of instructors. For instructors to grant information to understudies they should have an expansive information on their topic, the educational program and instructive benchmarks just as eagerness and a longing for learning over the span of their profession. Indeed, even workforce who have been working for a long time are feeling the squeeze to create a specific number of papers to pick up advancement. In this manner they frequently distribute papers in diaries that may not be of high caliber. This additionally implies there is more accentuation on distributing papers than on instructing. Another significant factor that influences quality training is the degree of understudies admitted to colleges.

World College Rankings and Regulation in Indian Higher Education:

Institute	2020	2019
IISc Bangalore	301-350	251-300
IIT-Ropar	301-350	NR
IIT-Indore	351-400	351-400
IIT-Bombay	401-500	401-500
IIT-Delhi	401-500	501-600
IIT-Kharagpur	401-500	501-600
ICT, Mumbai	501-600	NR
IIT-Gandhinagar	501-600	NR
IIT-Roorkee	501-600	401-500
Amrita Vishwa Vidyapeetham	501-600	601-800

- India has bounced altogether in The Occasions Advanced Education World College Rankings 2020, with 56 establishments causing it to the rundown, to up from 49 beforehand. Be that as it may, just because since 2012, not a solitary Indian college made it to the best 300 rundowns.

- The Indian Foundation of Science, Bengaluru still positions the most noteworthy yet now shares this situation, subsequent to dropping into the 301-350 section (from 251-300), because of a huge fall in its reference sway score, invalidating in research and showing condition and industry pay. Newcomer IIT Ropar shares the joint top spot with IISc, Bengaluru, pushing IIT Indore, which stays in the 351-400 band, into the third spot.

- The more established IITs - Bombay, Delhi and Kharagpur - are in the 401-500 section; IIT Roorkee is in the 501-600 and IIT Guwahati, Kanpur and IIT Madras in the 601-800 classification. So for what reason do the a lot more youthful IITs at Ropar and Indore - one was set up in 2008 a their more established, considerably more settled partners on the rankings front?

- "IIT Ropar and IIT Indore performed very well that they become best in India. As this measure is energetically weighted, performing commendably here helps rankings execution fundamentally," on various occasions Propelled instruction delegate prompted ET in answer to an informed request. IIT Ropar and IIT Indore are likewise littler establishments, which imply that they have a superior understudy/staff proportion which additionally improves their rankings count.

- In spite of this, both IIT Indore and IIT Ropar are behind other Indian organizations in industry salary, showing notoriety and research notoriety," said the representative.

- Generally, seven Indian colleges fall into a lower band this year, while the greater part of the nation's foundations stay stable. Be that as it may, there are a couple of establishments that have climbed in the rankings table, including IIT Delhi, IIT Kharagpur and JamiaMilliaIslamia.

- The best Indian establishments are for the most part portrayed by moderately solid scores for showing condition and industry salary, yet perform inadequately with regards to global standpoint contrasted and both territorial and worldwide partners.

- India has an enormous proportion of potential in worldwide propelled training, given its rapidly creating youth people and economy and usage of English language direction. The Indian government has solid aspirations to help the worldwide remaining of its t its top colleges and pull in outside understudies,scholastics and research joint effort. It now needs to back up these yearnings with elevated levels of venture - or hazard declining further in the midst of expanding worldwide challenge, particularly from different pieces of Asia," said Ellie Bothwell, THE rankings proofreader.

- Presently in its sixteenth year, the positioning incorporates more than 1,300 colleges from 92 nations. Rankings are done across 13 execution markers assembled into five regions: instructing (the learning environment), look into (volume, pay, notoriety), references (investigate impact), worldwide standpoint (staff, understudies and research) and industry result (information move).

- College of Oxford took the primary spot in the general rankings, trailed by California Foundation of Innovation, College of Cambridge, Stanford College and Massachusetts Establishment of Innovation.

Conclusion

With respect to postgraduate understudies, many originate from the different schools associated with colleges. These schools have no essential offices and resemble instructing workshops. All together for Indian colleges to improve their positioning and become world-class, the insufficiencies referenced must be handled. There is a need to actualize an inventive and transformational come nearer from essential to advanced education level to make the Indian instructive framework progressively pertinent and focused internationally. There is additionally a need to free colleges and universities in both open and private parts from political obstruction.

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Enhancing Sustainability through Higher Education: Utilizing Boutique's Waste into Sustainable Product

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ABSTRACT

The existence of the waste generated from all human activities with various industrial activities to improve their quality of life, can't be separated from the negative impact on the ecological balance and environmental sustainability. Textile Industry is almost the most essential consumer goods industry. However, it is also accused of being one of the most polluting industries. The staggering statistics of the number of clothes that end up in landfills is not news—in fact, what is new information is that landfills are brimming with so much urban waste that by 2050, India is reportedly going to need a landfill that's the size of its capital, New Delhi (as claimed by a joint report by Assocham and accounting firm PwC).This paper throws light on managing boutique waste which poses a threat to the environment. The methods suggested will drive a campaign towards utilizing boutique waste, and developing innovative products from the waste which in turn will help in reducing the textile waste to some extent and empower women from the underserved areas by developing their skills and capacity & providing them a sustainable livelihood.
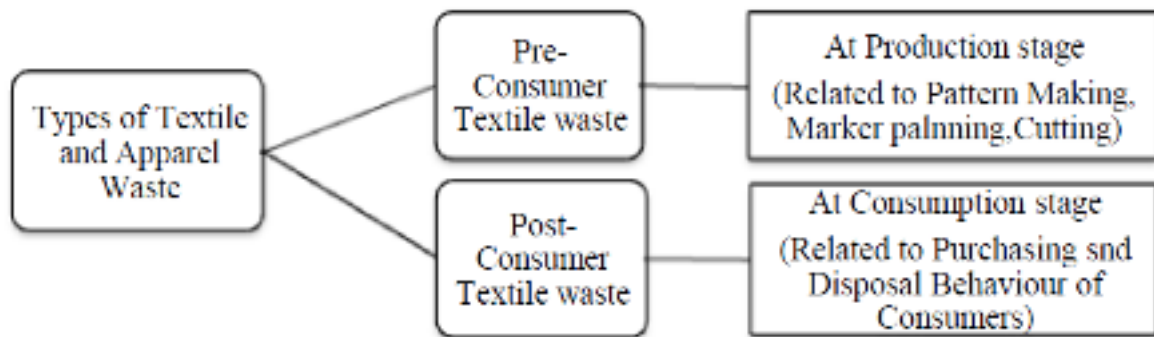
***Keywords:** Boutique's waste, Pre –post consumer waste, Women empowerment, Sustainability, Zero waste, Up-cycling.*

Introduction

Apparel and textile industry is a one of the most ancient and an established industry. Due to advancement in technologies, industrialization and rapid change in fashion there is huge production of textiles, and production is always associated with some form of pollution and waste.

Textile waste is the textile by-product of the manufacturing of garments, fabrics, yarns or fibres that are deemed unusable for its original purpose by the owner.

Textile waste can include fashion and textile industry waste, created during fibre, textile and clothing production, and consumer waste, created during consumer use and disposal. (Redress,2014). Textile waste can also be classified as:

- Pre-consumer textile waste is waste created at industrial level (damaged textile, cut and sew waste) consists of by-product materials from the textile, fibre and fabric industries. Pre-consumer textile waste is usually clean waste. (Chavan, 2014).

- Post-consumer waste ie waste created at household level (worn out clothes) is defined as any type of garment or household textile article that the owner no longer needs and decides to discard. These articles are discarded either because they are worn out, damaged, outgrown, or have gone out of fashion.

- Pre-consumer textile wastes produced during the manufacturing process can be recycled as raw materials for paper, furniture stuffing, mattress, etc. However for post-consumer textile wastes, as they are related to the purchasing and disposal behavior of different households, it is much more difficult to monitor and initiate collaboration in reducing textile wastes.

- (CTR, 2015) reported that in US, around 75% of the pre-consumer textile wastes can be diverted from the landfills and recycled, while only 15% of post-consumer textile wastes are recycled But in India the situation seems to quite gloomy, since manufacturers and consumers are comparatively less aware of the hazards related to environmental degradation.

The compositions of textiles affect the method of recycling. Ways by which textiles can be recycled includes:

- Sending waste textiles to the flocking industry where the shredded yarns are used for making filling material for automobile insulation and roofing felt.

- Recreating new household items from cutting waste or used clothes.

Each year 7, 50,000 tons of this waste is recycled into new raw materials for the automotive, furniture, mattress, coarse yarn, home furnishings, paper and other industries, but the amount of textile wastage is growing like a monster.

Major Causes of Textile Waste Generation:
- Industrialization
- Contemporary lifestyle
- Problem of over consumption
- Rapid change in fashion
- Easy and cheap availability of textiles
- Lack of consumer awareness about environment friendliness
- Lenient government policies
- Lack of classic designs

- Low popularity of second hand clothing
- Lack of consumer's textile care knowledge
- Lack of systematic pipeline of textile recycling

It was estimated that total solid waste generated by 217 million people living in urban areas are expected to increase from 83.8 million tons in 2015 to 221 million tons in 2030. This ignites thinking for waste management. (Agarwal, R., Sharan, M. (2015)

Solutions to Minimize Textile and Apparelwaste

The three R's are commonly used terms in waste management; they stand for —reduce, reuse, and recycle. Due to rise in waste generation, its processing costs have also increased which has resulted inless available landfill space. In this scenario the three R`s have become the main principles in sustainable waste management. Along with three R's waste hierarchy model whichranks waste management options according to the best environmental outcomes taking into consideration the lifecycle of the material is also a must to follow.

The steps of waste hierarchy

- Prevention

  Prevention is the most preferred step in the waste hierarchy ie prevent waste from occurring in the manufacturing process of textiles and clothing.

- Reuse

  This is the second step in waste hierarchy, after lowering theamount of waste from production. When people do not want their garments they can keep them, throw in the garbage, sell them or give them away

- Recycling

  Recycle is concerned with providing the manufacturer with re-processed raw material to use as an input to make new goods. Recycling material savesresources and usually uses less energy than the production of new material.

- Disposal

  It is the last step and the worst situation in the waste hierarchy. According to Palm (2011) disposal is the most common way of treating textile waste after charity submission. Disposal involves mostly energy recovery through incineration, in this process the disposed textiles are burned and produce energy.

Thus, the waste hierarchy gives top priority to preventing waste and least priority to disposal. When waste is created, it gives priority to preparing it for reuse, then recycling and last of all disposal.

In addition to the above mentioned general techniques of waste management there are two specific techniques in the field of textiles and fashion which have been receiving considerable mention in the recent literature, namely; Zero waste management techniques and Up-cycling. These two novel techniques could prove to be beneficial for waste utilization at pre and post consumer levels respectively.

Zero waste fashion design

Rissanen, (2013) reported that zero waste fashion design (ZWFD) is a method of pattern making that particularly aims to eliminate fabric waste from garment production. In its larger sense, the concept of zero waste fashion refers to a fashion system where waste is eliminated through all stages of garment design, production chain and the use phase.

Up-cycling: a solution to post consumer textile waste

Up-cycling is a process where waste or useless products are transformed into new materials or products of equal or better quality or a higher environmental value. It is taking waste and maintaining or improving the quality of it by makingsomething new. Investment in recycling of waste is a viable income generating venture for low income groups. Empowering women as sustainable business owners creates a chain of positive impacts by building their financial independence and strengthening their capacity to contribute to their communities and the environment.

Existing boutique waste textiles can be a part of recycling system which can help in that performs the recovery, reuse and recycling of textiles. Growing amounts of textiles waste in Boutiques have become a concern. Boutique waste includes leftover fabrics, fabric off cuts, waste threads, scraps and trimmings. Be it any apparel or furnishing textile, trash or any scrap, Boutique waste can be used to create Handbags, Jewelry, Accessories, foot wears and what not.The information pursued in this research highlights the boutique waste that can be reused and repurposed into something innovative. Recycling boutique wastes to design Punjabi jutties, to make certain that the manufacturing process involved to create something new doesn't end in doing more harm than good to the world's well-being. Empowering women of rural areas is also an important aspect of the study. Teaching and demonstrating them various techniques to design and create jutti was an important step to provide them a platform for generating income and become self reliant.

Process of Jutti Development From Boutique Waste

Conclusion

The study reflects that utilizing waste can be subjected to creativity by modifications with innovative ideas and different techniques used for designing which would serve as a dual purpose of introducing

something new and creative to the world.Using boutique waste for construction of jutties can give the waste a very unique and unexpected life. Waste from different boutiques was collected and combined with different surface ornamentation techniques to design jutties.The execution of this study revealed that using textile waste for designing jutties is highly appreciated. The colorful jutties from waste attracted consumers as well as shopkeepers. Thus, it can be concluded that in today's world when fashion is changing every second, it is important to utilize more waste materials and save our environment and to spread awareness regarding usage of waste material in the form of art through various techniques and raw materials. The study also serves as a small step towards capacity building and empowering women with limited resources.

Recommendation

- Awareness raising activities such as seminars and workshops on effects of hazardous waste and waste treatment facility should be conducted more frequently.

- Public awareness of waste segregation, recycling and reuse to be raised through public campaigns and media demonstrations with the help of NGOs.

- The municipality should facilitate innovative community based programs rather than capital-intensive projects. There are solutions but problems need to be addressed in effective manner and solutions to reach to the public.

- Capacity building workshops for women should be conducted regularly.

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Fostering Innovation and Research in Higher Education through Pithora Painting

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ABSTRACT

The main aim of the higher education is equipping students with the requisite knowledge, skills, attitudes and values to create a sustainable future.To that end, students should cultivate critical and creative thinking skills, engage in authentic interdisciplinary learning activities and develop a value system that emphasises responsibility to self, others and the planet. Highly educated people in higher education institutions are seen as national experts in their fields of study. Additionally, through research at colleges and universities, many of the innovations that we see in thousands of products that are used around the world, were made possible by creative researches in higher education institutions. One of the most important roles of institutions of higher education is to serve as well springs of innovation and creativity. Creativity is an active process necessarily involved in innovation. It is a learning habit that requires skill as well as specific understanding of the contexts in which creativity is being applied. The creative process is the heart of innovation.Thereby, Indian artisans in tribal areas dye, weave, embroider and print traditional textiles. One such art form is the pithora paintings of the Rathwa and Bhilala tribes who live in central Gujarat. Pithora paintings are traditional wall paintings where tribal Gods known locally as Pithora Dev are painted and worshipped as a form of thanksgiving. Pithora paintings are executed on three inner walls of their houses. These paintings have significance in their lives and executing the Pithora paintings in their homes brings peace, prosperity and happiness. The distinguishing feature of Pithora painting is a group of seven horses enclosed within a rectangular fence representing the seven hills that surround the geographical area. The wavy line depicts the river Narmada cuts in the painting. Therefore, establishment of ventures based on traditional art with the aid of higher education would help individuals to grow in their respective fields.

Keywords: Higher education, Innovation, pithora painting.

Introduction

Today is the era of technology and in order to meet the pace of moving world the regular academic training needs to be coupled with higher education. Higher levels of education are associated with a wide range of positive outcomes. Higher education also responsible for more productive economy as the

proportion of skilled workers increases, since skilled workers can more efficiently carry out tasks that require innovative thinking. Innovation in education encourages teachers and students to explore, research and use all the tools to uncover something new. Innovation improves education because it compels students to use a higher level of thinking to solve problems. It is the creation and transformation of new knowledge into new products, processes, or services that meet market needs. As such, innovation creates new ventures and is the fundamental source of growth in industry.

India has rich heritage of art and culture. From ancient ages paintings are part of Indian art. The variety of motifs, techniques and colors of these paintings can be used to create a lot of diversified products with innovations. Considering this approach researcher tried to design, "designing of bedroom range using motifs from pithora painting".

Pithora art is a form of folk painting of tribes, residing in eastern Gujarat. Pithora, a ritual wall painting depicting the myth of creation is very characteristic of the Bhils and Bhilalas of western Madhya Pradesh and the Rathwas of eastern Gujarat. This myth centres around the Gods Babo Ind and his nephew Pithoro and is connected with the fecundity of Mother Earth ho is impregnated by the divine bull Nandyo. The main theme of the painting is the marriage procession of Pithora and Pithori which is attended by the Gods and other beings.

One of the oldest handicrafts used as a tool by man to express his interest, sentimental and emotions is needle craft embroider. Patchwork is a type of needle work in which pieces of small material are sewn together to make a much large finished piece. Appliqué is the process of attaching cut-out fabric shapes to the foundation fabric by means of stitching which may itself be plain or colourful and decorative.

Aims and objectives

- Collection of motifs
- To develop designs of bedroom range using different motifs on CAD software.
- To construct most preferred designs of bedroom range using Pithora motifs.
- To check the marketability & consumer acceptability of bedroom range.

Methodology

Collection of motifs

Collected motifs were categories into different categories based on their type. The different categories are: -

- Horse motifs
- Elephant motifs
- Bird motifs
- Buffalo motifs
- Tree motifs
- Border motifs

HORSE MOTIFS

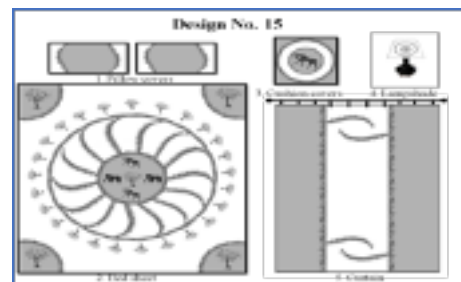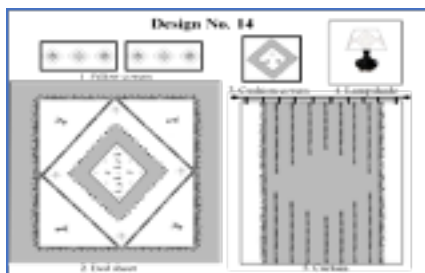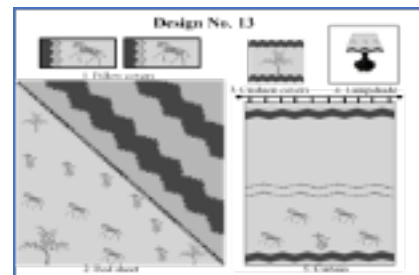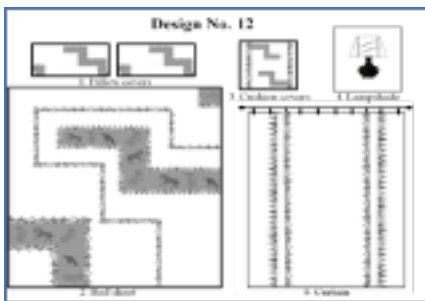## ELEPHANT MOTIFS

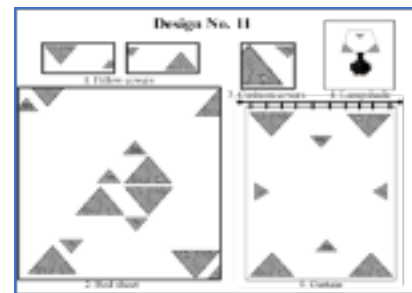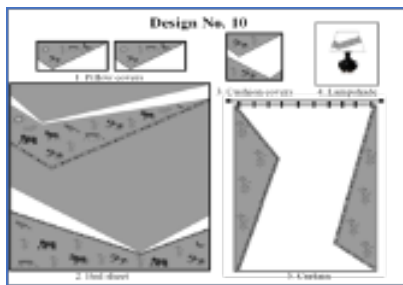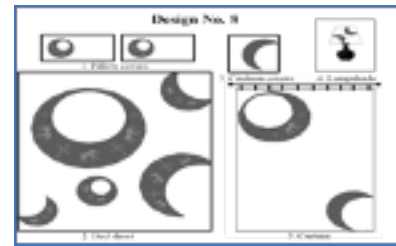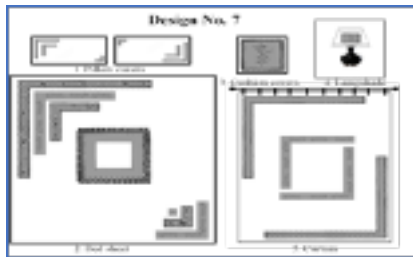## BIRD MOTIFS

BUFFALO MOTIFS

TREE MOTIFS

BORDER MOTIFS

Creation of designs

The main aim of the study was to create bed room range which included a bedspread, pillow covers, cushion covers, curtain and lampshade. Total fifteen designs were created with different motifs in grey scale using Adobe Photoshop.

Selection of fabric

A market survey was conducted to find out the availability of various types of fabrics suitable for bedroom range as it required having good colour fastness. The collected fabric samples were displayed for selection by a panel which included Glaze cotton, Cotton, Chanderi Silk, Chanderi Cotton and Casement.

Selection of colour

For selection of colour for bedroom range, two most preferred designs were developed in two different colour schemes that were: Monochromatic colour scheme and Accented-Neutral colour Scheme.

Evaluation & statistical analysis of designs

The designs were evaluated by a panel of judges having knowledge about elements of art and principles of design. The designs that got the highest scores were considered the most preferred designs.

Construction of bedroom range

Themost preferred designs with selected colour schemes are made through the technique of Patch work and Appliqué work. Appliqué work is done on panels.

Costing of bedroom range

Before checking the marketability and consumer acceptability of the products, the cost of bedroom range was estimated by adding the cost of fabrics, labour, threads and notions used. The cost price of final products was then calculated. A profit of 20% of the cost price of the bedroom range was added to calculate the sale price.

Marketability and Consumer acceptability

To check the consumer acceptability and Marketability of the final products a questionnaire was framed, and responses were noted down from the owners or managers of the shops and customers at the retail shops of Chandigarh and Panchkula dealing in household linens. The data was then calculated and analysed.

Results and Discussion

Evaluation of fabric: -

Selection of fabric for bed sheet, pillow covers and cushion covers:

GlazedCotton was the most preferred fabric with highest score of 50 and ranked first. Sample no. 2 i.e. Cottonscores 46 marks and ranked second.

Selection of fabric for Curtain and Lampshade: -

Chanderi silk was the most preferred fabric with 58 score and ranked firstposition.Chanderi cotton scores 47 marks with second position.

Evaluation of colour

Monochromatic colour scheme: -

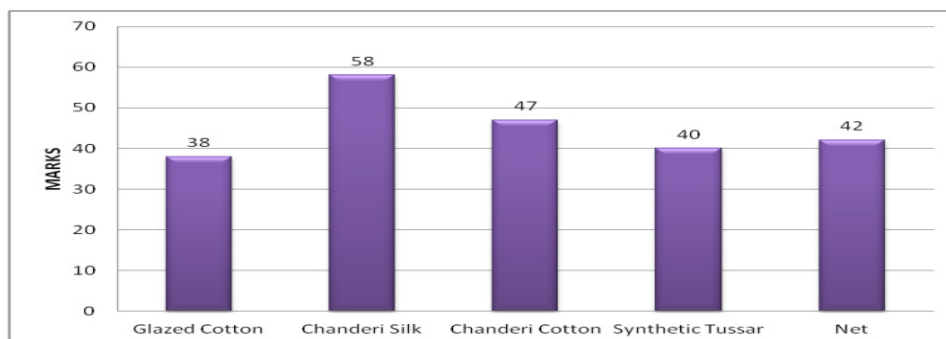| RANK	9	2	7	8	5	11	12	4	10	3	1	6

MCS11 obtained maximum score i.e. 162 score and rank first. Second rank was bagged by MCS 2 with 148 score.

Accented-Neutral colour scheme

RANK	6	4	10	7	9	11	12	8	5	3	2	1

ANCS12 was the most preferred colour scheme with 177 score and ranked first. Second rank was taken by ANCS 11 with 170 score.

Evaluation of most preferred design:-

RANK	4	7	9	8	3	2	12	6	1	5	15	14	10	11	13

Design no. 9 was the most preferred design with 673 score and was ranked first. Second rank was bagged by Designno. 6 with 666 score.

Design 9 (RANK 1) DESIGN 6 (RANK 2)

Costing of bedroom range: -

The cost of each bedroom range was estimated by adding cost of fabric, dyeing, lining, notions, labour & profit. It was found that the price of first set was Rs. 5,479/- and second set was Rs.5,173.

Marketability and Consumer acceptability: -The marketability of constructed bed room range was done in Chandigarh and Panchkula. The shopkeeper finds the bedroom range innovative and unique and was highly encouraged. The bedroom range was highly acceptable by consumer, as they found them to exclusive and unique.

Conclusion

Hence to conclude, the execution of this study revealed that, this art is not common among people and very few people knows about this tribe and paintings. The study helps in reviving the tribal art and provide an exclusive and innovative form of bedroom range using motifs with appliqué and patchwork. An in-depth observed study of the Pithora art may bring about newer insights regarding the ways to use their art form for creative approach in textiles and progress along with preservation of their art form.

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Role of Nutritious Garden in Educational Institutes

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ABSTRACT

The paper presents the role of nutrition garden in educational institutes. Nutritional garden plays an important role in meeting requirement of food, medicine, fodder and firewood. The global food and nutrition problem rest on the relationship between population and food supply. The nutritious garden is an expansion of regular work of students. There is no better way of bringing students into get in touch with with plant life than by raising flowers and vegetables in the garden. The garden in an educational institute has an important relation to aesthetics and environmental amelioration. In other words, the realistic approach to improve the food and nutritional status of people is to increase their knowledge of food production, with special awareness to crops rich in the nutrients now deficient in the common diet. Schoolyard gardens are involved as a nutrition education tool. Nutrition Garden can offer for an outdoor activity while also teaching the consequence of nutrient-diet rich. Most important, in educational institutes nutritious garden gives a first-hand experience of nature. Environmental education during the school and college period should be based on the sense of wonder and the joy of discovery. According to the survey, information provided by the states and UTs nutrition gardens has been developed in over one lakh school Nutritious gardens are a wonderful approach to make use of the yard as a classroom, reconnect students with the natural world, their source of food, and to teach them precious gardening and agriculture concepts and skills.

Keywords: Nutrition, Food, Garden, Education, Environment and Students

Introduction

A garden is a planned space, usually outdoors, set aside for the display, cultivation, or enjoyment of plants and other forms of nature. The garden can incorporate both natural and man-made materials. In a nutritious garden, students are set to work cultivating flower and vegetable gardens. The nutritious garden is an outgrowth of regular work of students. It is an effort to get students out of doors and away from books learn practically about nature. It is a healthy realism putting more vigor and intensity into educational institutes. The nutritious-garden has an significant relation to several studies. First of these

is nature study. There is no better way of bringing students into contact with plant life than by raising flowers and vegetables in the garden. The boys and girls get out of doors, prepare the soil, plant the seed, observe the growth of plants, cultivate them through the season, and finally observe the growth and ripening of the fruit of their hard work. This whole cycle of growth and change is the most fundamental thing in plant study.

In the second place the garden has a very important place in the study of geography. In the home geography in the early grades classes of students are required to visit the gardens and study the processes of cultivation and marketing the products. These are basic lessons in geography. In this way gardening leads on to agriculture, scientific farming, and fruit raising. The garden naturally suggests farming, the raising of corn and other grains, the feeding of cattle, dairying and butter-making, fruit-culture, as of berries, stone-fruits, apples and pears. Scientific agriculture and fruit-raising are based on principles of careful selection of seed and of wise cultivation, of fertilizing and preserving soils, of grafting, pruning and caring for fruit trees and dealing with insect pests.

The garden in an educational institute has an important relation to aesthetics. Floriculture, landscape gardening, tree-planting and fruit-culture appeal to the sense of beauty. The whole yard and garden together need to be planted and laid out on principles of taste and attractiveness.

Perhaps the most important relation of the garden is that to the home. Where boys and girls become properly interested in the nutritious garden, they naturally desire to raise a garden at home in their own backyard and perhaps flowerbeds and trees in the front yard. The whole town may take on a new appearance, in its yards and gardens, on account of this interest developed in the school garden. Beauty and utility are combined; the home-table is supplied with vegetables and beautified by the flowers which the students themselves raise.

Governments are increasingly concerned about rising rates of serious physical and psychological conditions—such as cancer, heart disease, diabetes, asthma, depression and emotional stress—in city populations across the globe. Medical interventions are limited in tackling these issues as they are related to a variety of complex factors. Urban lifestyles with their characteristic car dependency, long commuter distances from home to work and time pressures can make daily healthy habits difficult (Thompson, 2007; Mead et al, 2006; Frumkin et al, 2004). Nutritious gardens are a wonderful technique to use the yard as a classroom, reconnect students with the natural world and the true source of their food, and teach them valuable gardening and agriculture concepts and skills that integrate with several subjects, such as math, science, art, health and physical education, and social studies, as well as several educational goals, including personal and social responsibility.

Objectives of Nutritious Garden

1. To help in addressing malnutrition & micro nutrient deficiencies by utilization of freshly grown vegetables.
2. To give students first-hand experience with nature and gardening.
3. To enhance the knowledge of students regarding nutritional aspects of vegetables and harmful effects of junk food

The Benefit of Nutritious Garden

Experience and research have shown numerous benefits of nutritious gardens and natural landscaping:

- Students learn focus and patience, cooperation, teamwork and social skills
- They gain self-confidence and a sense of "capableness" along with new skills and knowledge in food growing — soon-to-be-vital for the 21st century

- Garden-based teaching addresses different learning styles and intelligences; our non-readers can blossom in the garden.
- Achievement scores improve because learning is more relevant and hands-on
- Students become more fit and healthy as they spend more time active in the outdoors and start choosing healthy food over junk.
- The yard is diversified and beautified

Nutritious Garden Theme

Special themes make the garden more fun, and offer lots of opportunities for creative and critical thinking.

- ABC garden (A is for artichokes or alyssum, B is for broccoli or begonias, etc.)
- Vegetable soup garden (what veggies they would like to grow to put in their soup next autumn)
- Crayon colour garden or rainbow garden (purple potatoes)
- Tea garden, herb garden or perfume garden (students at one school made herbal tea bags from their scratch and sniff garden to sell at school events as a fundraiser for their Green Club; making and selling bouquets garnis or scented sachets would also work)
- History garden ("If you have a pocket of native plants, you have an historical treasure. Consider it an antique that needs your help to make it through the coming hundreds of years." — Merv Wallace)
- Discovery or experimental garden (a local farmer once told me that the best gardeners he'd ever met were soil scientists, because they understood that different plants thrive on different types of soil — imagine the experimental possibilities!)
- Permaculture garden or edible landscaping
- A garden of nature's medicines (herbal plants)
- Fruit garden (with dwarf or espaliered fruit trees, strawberry beds, vining grapes or kiwis, and a "berry walk")
- Giant plants (pumpkins, squash, corn, hollyhocks, sunflowers)
- Rain garden (landscaping to prevent runoff)
- Winter garden (in temperate zones, or to provide winter food for birds)
- Accessible garden (with beds raised high enough for students or staff who use wheelchairs or walkers to be able to access them; visit accessible garden for more information and examples)
- A climate change friendly garden, where students can learn about "carbon farming" and regenerative ways to care for the soil

Founding Nutritious Garden in Educational Institutes

- The primary goal of a Nutritious Garden is to allow the students to grow plants from start to finish. There is no greater reward than observing a tiny seed turn into a beautiful flower or something to eat.
- Nutritious gardens can help support food security and get better income production and livelihoods.
- Eco club in an educational institutes provide platform to students to get knowledge about environment. The meaning of an eco club means to work in a group who works to contribute to improving environmental conditions. In eco clubs, programs and activities in schools or colleges encourage students to reduce pollution, plant trees, and more.

Conclusion

Nutritional Gardens are good for learning. They are highly practical and a direct form of education, where students can learn how to grow good food, which not only improves health, but also provides opportunities for livelihood and increased self-sufficiency. Apart from practical skills in agriculture and horticulture, gardens are a living laboratory for the study of environmental issues and life sciences. Organic gardening conserves the soil, protects the environment and works with nature rather than against it. It is a method of growing food that relies on the earth's natural resources, such as land, sun, air, rainfall, plants, animals and people. It uses natural methods to keep the soil fertile and healthy and to control insects, pests and diseases. Organic methods can help keep our water sources clean and free of chemicals. It is also safer for students because there are no dangerous chemicals. Planting trees in the Nutrition Gardens shall be an initiative towards reducing the harmful effects of climate change.

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Socio-Economic Empowerment of Women through Self-help Groups

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ABSTRACT

Women empowerment is a process in which women challenge the existing norms and culture, to effectively promote their wellbeing. The participation of women in Self Help Groups (SHGs) made a significant impact on their empowerment both in social and economic aspects. Rural women today have been suffering a lot due to the feeling of helplessness and lack of Decision-making capabilities in financial matters. SHGs are the most recent development for them which could enable them to come forward and make them self dependent and self employed.

Keywords: *Empowerment, Self-help groups, Growth, Poverty, Socio-Economic Development.*

Introduction

Empowerment of Women through self help Groups Mahatma Gandhi states that the position of women the society is an index of its civilization. "Train a man and you train an individual, Train a woman and you build a nation'. The SHGs (Self Help Groups) are the major resource of inspiration for women's welfare. In an attempt to uplifting the women, the government has initiated Women Welfare Programmes through development centers, rural agencies, banks, NABARD etc. In India, most of the SHGs are lead by woman with benefits of socio-economic homogeneity smaller size, functionality, participation, voluntary operating mode and non political women. The SHGs in India operating from April 1999, have entered into various fields like dairy farms, fisheries, ration shops, handlooms, farm cultivation, rain water harvesting etc. Special programmes have been designed for training and capacity building of women beneficiaries of the SHGs. Regular skill development training programmes is being organized for value addition to DWCRA and SHGs productions for better packaging, standardization of ingredients, pricing and to develop marketing skills among women. Women are exposed to best and relevant technologies displayed at training and technology development centers (TTDCs) in all districts.

The concept of SHGs moulds women as a responsible citizen of the country with social and economic status. It leads women to develop the habit of raising loans, form savings, inculcated with a sense of belongingness, habit of thrift and discipline among themselves. Groups actively take part in social welfare programmes focusing on dowry, AIDS awareness, nutrition, legal literacy, multiple roles of women and poverty alleviation programmes. The concept of self-monitoring has been introduced by the SHGs in a phased manner with the aim to make women totally own their movement and institutionalize its sustainability through networking. The women groups have taken the initiative to educate their own members with great enthusiasm. Women belonging to lowest strata of the society are getting habituated to savings and paved the way for decision making power in the family. In a developed country like India, SHGs uplift the women who are mostly invisible in the social structure by creating self- confidence and self-reliance.

Self-help Groups

SGS is defined as a, self governed, peer controlled information group of people with similar socio-economic background and having a desire to collectively perform common purpose. Self help group have been able to activate small savings either on weekly or monthly basis from person who were not expected to have any savings. They have been capable to effectively recycle the resources generated among the members for meeting the useful and growing credit needs of members of the group. The recognition, configuration and nurturing of groups is carried out by NGOs, other development agencies are Banks with the promoters inculcating habit of thrift among members. Once the groups are trained and strengthened, they are linked to nearby banks, usually within 6 months of formation. Banks offer collateral-free credit in rising proportion to the group's accumulated savings. All the initiatives such as selection of borrowers for availing credit, identification of activity until cost volume of loan, managing of finance and procedures for repayment are undertaken by the poor at the group level, in brief SHGs can be known as a plan by the people, of the people, for the people. It reflects the real people's contribution in the process of development at micro level.

Conceptualization of Empowerment

Women are an integral part of every economy. All round development and harmonious growth of a nation would be possible only when women are considered as equal partners in progress with men. However, in most developing countries, women have a low socio and economic status. In such countries effective empowerment of women is essential to harness the women labour in the main stream of economic development.Empowerment is the process of enabling or authorizing an individual to think, behave, act and central work in an autonomous way. It is the process by which one can gain control over one's destiny and the circumstances of their lives. Empowerment can be viewed as means of creating a social environment in which one can make decisions and make choices either individually or collectively for social transformation. Women empowerment enables autonomy and control over their lives. The empowered women become agents of their own development, able to exercise choices to set their own agenda and be strong enough to challenge their subordinate position in the society. Although women constitute half of world's population yet they are the largest group which is excluded from the benefits of social and economic development. Women constitute a strong labour force which needs to be mobilized and encouraged to make an effective contribution to the development process. In India, the work participation rate for women is less than half that of men. Despite efforts made towards economic empowerment of women, majority of the active female population continue to be confined to micro, small scale enterprises and the informal sector.

Economic Empowerment of Women: The concept and approach

Empowerment of women has become a subject of growing importance around the world in contemporary times. The concern is seen at different levels and circles which include government, bureaucracy, nongovernmental organizations, researchers and women's empowerment. There has also been a shift in the demands of women from equality in 1970s to development in the 1980s to empowermentsocial, political and economic since the 1990s. Since the term empowerment came in to be used from 80s. Empowerment of women has come to be accepted as a key objective of development. Empowerment is a process of improving women's control over resources, ideology and self. It is a process of enlarging the entitlements and choices of women.

Empowerment

The dictionary meaning of the word 'empowerment' is to give power to make them able (person/ group). The Oxford Dictionary defines empowerment as the 'action of empowering, the state of being

empowered'. The term 'empowerment' as the range of activities from individual self-assertion to collective resistance, protest and mobilization that challenge basic power relations. Empowerment is a process aimed at changing the nature and directions of systematic forces, which marginalize women and other disadvantaged sections in a given context.

Economic Empowerment

Economic empowerment refers to earning power, collective bargaining for economic gains, control over means of production, involvement in decision-making regarding economic aspects of development of skills in management. Economic empowerment, implies a process of redistribution of resources and power between different groups. It helps in building confidence, self- assertion and courage.

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New initiatives of Information and Communication Technology: Needs Augmented Reality for Learning Science in Indian Higher Education

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ABSTRACT

Education is a valuable asset for sustainable development of every nation. India is a developing country that requires uplifting qualitative teaching learning process in various disciples. Rapidly, increasing number of learners in Indian universities, colleges and institutions involve new initiatives of Information and Communication Technology (ICT) in Science education to explore and enhance the quality of teaching learning process. To reduce the gap between ICT and traditional method of teaching learning process of science in terms of laboratory practices and explanation of figures given in the Science discipline(Zoology, Botany, Chemistry and Physics etc.) need to adopt Augmented Reality application software and implement in teaching learning environment. To make education simpler and accessible focus should be to design and develop an interactive augmented reality (AR) application software, that should be openly accessible and available online free of cost to download on mobile and Personnel Computer etc. This software can present the real experiences of teaching and learning activities of science anywhere without replacing the real environment. Interactive AR technologies have positive potential and advantages that can be adapted to contribute as an inclusive, equitable, and quality education for Sustainable Development Goals 4 (SDG-4). This paper elaborates and discusses all the steps of augmented reality (AR) application software (ePathshala AR app for an example) which is helpful to understand science in depth. Further, this paper aims to propose several related practical oriented steps and procedures to be followed that could be applied in science to transform the learning effectively. Important suggestions put forth to handle the issues and challenges related to Augmented Reality Application Software.

***Keywords:** AR, Augmented Reality, ICT, Interactive programme, Higher Education*

Introduction

The assistance of Information and Communication Technology (ICT) in the main domains, particularly in education is widely welcome. Moreover, technology is required and extremely helpful in science, (Physics, Chemistry, Zoology, Botany and related discipline etc.) to modify in depth and complex scientific terms and processes. ICT integrated learning technique cultivates motivation, enhance collaboration, give the ability to construct their own information and knowledge stimulates higher order thinking skills and innovative thinking in the learning method that support the sustainable development in schooling

education. Therefore, Augmented Reality (AR) with the addition of multimedia elements and theoretical steering has been planned to reinforce learners' science motivation to facilitate a learning experience beyond belief and expectation.

Central Institute of Educational Technology (CIET), a constituent unit of NCERT autonomous organisation of Government of India is developing e-resource material for school and teacher education based on textbooks. CIET, takes valuable technological initiatives to integrate the ICT in textbooks of Science at Secondary level published by NCERT to help teachers, educators, parents and students (Fig:1) learn actively and to understand, improve, gain and implement the real experience of information as given in the textbooks of Science in the means of what exactly try to explain.

Fig.1 User of Information and Communication Technology (ICT)

With the help ePathshala AR app, user sees the "real" world appears as an image on the screen so the user sees both the real world and the virtual objects all composed of pixels on a screen.

Features of ePathshala AR application software

The important seven(Text, Audio, Video, Animation, Graphics, Interactive and Simulation) multimedia (MM) elements, which are able to provide useful and multi-sensory learning, experience. Additionally, a 3D model also delivers an in depth and an interactive learning experience.

Access and Use of ePathshala AR app

Download of e-Pathshala AR app through play store which is freely available and open access

Use of e-Pathshala AR app

To access and practice on figures and activities given in the textbook, learner can be rotate their mobile in horizontal, vertical, left, right, up and down direction following interactive steps given accordingly to the task performed. Similarly, this kind of Augmented Reality app can be designed and developed for Higher education. How to use ePathshala AR app, important examples are given below:

Zoology

Augmented view of Animal Cell given in figure 2

Fig.2 Augmented Reality view of Animal Cell

Botany

Augmented Reality based Cross section view of leaf and molecular view of opening and closing of stomata in given figure 3.

Fig No1 Select 'Class' | **Fig No:2 Select 'Subject'** | **Fig No:3 Select 'Chapter'** | **Fig No:4 Select 'Topic'**

Fig No:5 Select 'Fig No.6.1' | **Fig No:6 Loading 'image of leaf'** | **Fig No:7 Textbook Image** | **Fig No:8 Augmented Leaf**

Fig No:9 'After tap on top of leaf to cut in transverse cross section and look | **Fig No:10 After tap on circle, Augmented cross section can be view in different angles** | **Fig No:11 Molecular view of Stomata at open stage, motion of H_2O molecule** | **Fig No:12 Opening and Closing of Stomata can be view in different direction**

Fig.3 Augmented Reality Cross Section view of Leaf and Stomata

Chemistry

Augmented Reality based activity of separation of dyes in black ink given in Figure 4.

Fig1:Select 'Class' | **Fig2:Select 'Subject'** | **Fig3:Select 'Chapter'** | **Fig4:Select 'Chapter 2'**

Fig5:Select 'Fig 2.8' | **Fig6: Click on 'Go'** | **Fig7:Loading 'Fig2.8'** | **Fig8: Textbook 'Activity'**

Fig 9: Augmented 'Activity 2.7'

Fig 10: Darw Line on 'filter Paper'

Fig 11: Put Ink on Centre on line

Fig12: Keep filter paper above the base line in the Jar

Fig13: Components of Ink gets soluble in water and rises on the filter paper

Fig14: More soluble Components rises faster and in this way components seperated
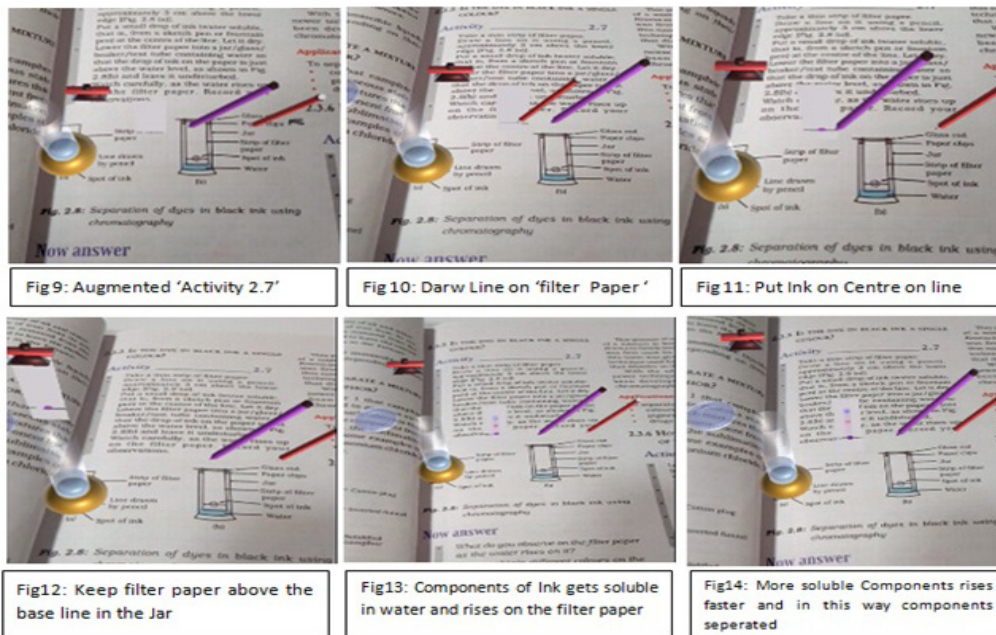
Fig.4 Augmented Reality of Activity conducted on 'Soluble Components on Filter Paper'

Physics

Augmented Reality Electric Generator 'Deflection of Current occur in Galvanometer' is given in Figure 5.
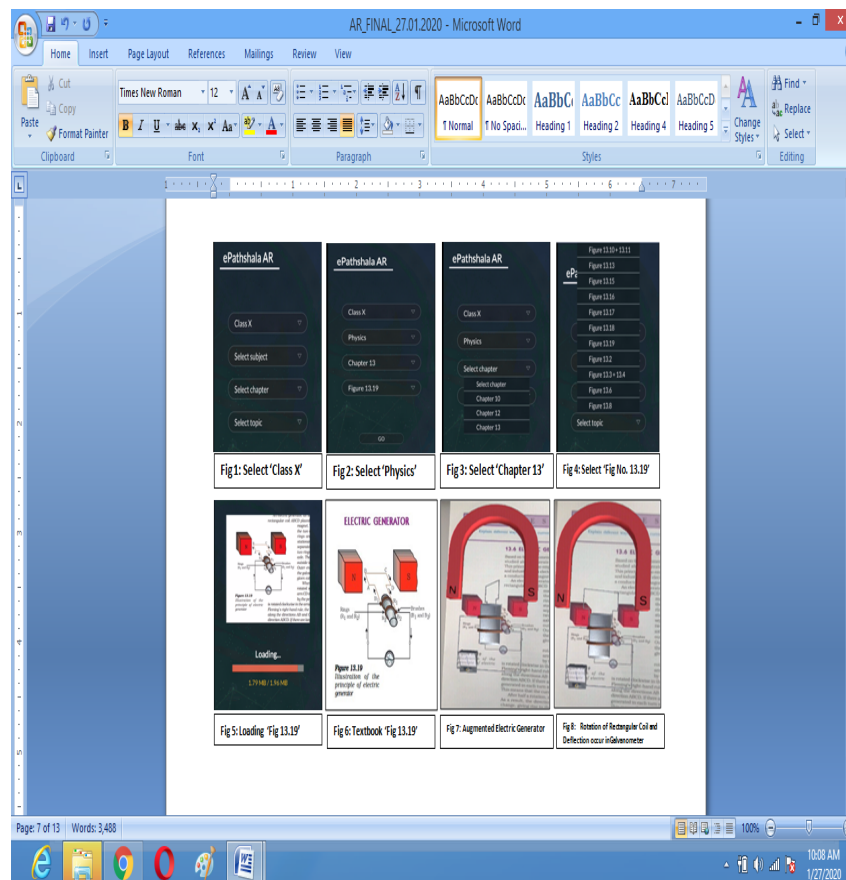

Fig.5 Augmented Reality of Activity conducted on 'Soluble Components on Filter Paper'

Important parameters of AR in science education

Cognitive Effort: Under this parameter learner discover learning in 3Dimension; see the unseen and juxtaposing information related to their textbooks.

Motivation: Students increase involvement in learning science, and positive attitudes towards science through motivation that shows greater progression.

Situated learning: Augmented Reality enhances the way to present the information and knowledge and the sense of presence, Immersion, immediacy, cooperation, interaction and location.

Inquiry based learning:

Inquiry-based learning: Interaction and textbook-based initiatives that area unit highlighted is dynamical teaching from being deductive to be inquiry-based. Inquiry-based teaching in science promotes students' curiosity and interest in science.

Current Science Textbooks

The existence of textbooks in an exceedingly learning method continues to be wide welcome because of sure criteria like transportability, mobility, and strength. However, some limitations of the textbooks a reason for low achievements among students. These embrace limitations of textbooks in convincing sure terms within the 3D model Associate in Nursing in remodelling time-related data in an animated manner like motion and textbook's non- interactive options, like static text, 2D colour pictures, and straightforward illustrations..

Augmented Reality (AR) in Science Learning

AR enhances the users' perception with the real world, stimulates creativity, enhances students' comprehension of the topic, and provides a multisensory learning atmosphere that perpetually engages students within the learning method It provides access to the Educators, and Teachers.

Higher Education

Higher Education is required to enhance and uplift the uncovered areas of research and development such as top to bottom and bottom to top approach in terms of teaching-learning processes and interventions to achieve quality education for its use and dissemination among various stakeholders and the user community of education that wish and want to contribute their efforts in national development and humankind. ICTs help and support to bring out and solve the complex issues of education at a higher level to make it easier and usable at low or free of cost, reduce the time limit of access and use of resources.

Some of the major issues try to put fort that should be overcome for a sustainable and Higher Education are

- Limited numbers of trained science and technology teachers' taking progressive participation to focus on ICT and their access and use in interactively through Augmented Reality App

- The insufficient in-service training of the science teacher for the transition state of a new program. As discussed e-Pathshala AR app, similarly can help to overcome the major issues creates a problem in Higher Education in India.

Conclusion

Integration of Information and Communication Technology in terms of Educational Technology is growing like an organism to uplift and enhance the quality of education from primary to a Higher level that involved teachers, educators, students, and parents, etc. ePathshala AR app will work as an example of the development of a new Augmented Reality app for academicians, researchers, students, and

developers, etc. This app will also improve the learning outcomes among science learning at the Higher Education system. It will also increase the employment opportunities at different stages accordingly to the qualification and skills of the learner, particularly in India.

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Higher Education in Indian Socio-Economic Context

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ABSTRACT

Socio economic status affects the overall wellbeing of an individual. Low socioeconomic status (SES) is often related to poverty, low academic achievement, ill health, lack of proper resource distribution which in turn affects the quality of life. This article provides a critical appraisal of the student's SES in context to Indian higher education participation. SES has an effect on the access and success in higher education. The discomfort, struggle and the stress the students of low SES experience had received little attention. Unequal access to higher education by students of low SES is based on region, economic and social disparities, opportunities, career selection, financial support which in turn affects the aspirations. All these issues are discussed and highlighted in this paper. Legislation and policies that explore and work on socioeconomic disparities in higher education has to be worked upon.

Introduction

Higher education plays a crucial role in improving the economic growth, reducing poverty and socio economic inequalities in a country. It plays an important role in determining the quality of life, opportunities and privileges the students of low SES experience. Higher education plays a critical role in liberating the potential of Indian youth for both economic and technological advancement of the country. Higher education which is responsible to bring down the inequalities in the society is itself responsible for major inequalities existing in the society. Despite significant and remarkable progress in Indian higher education system there are major challenges and issues the system encounters.

SES *vs.* educational issues- The school systems in low-SES communities are often under resourced, negatively affecting students' academic progress and outcomes **[1]** Privatization of higher education accompanied by high fee structure and non availability of financial aid restricts the poor to attend government institutes. Preference for students with top scores in higher educational institutes inhibits the enrollment of students with low score from low SES. There is a gap between the education provided at higher education institutes and the job recruitment of the candidates by the public and private sectors.

SES *vs.* college admissions- There are a variety of reasons why students of low SES can't apply for the elite universities. Reasons include unfavourable admission procedures, too many pre requisites to apply, lack of proper information about the institutes, inflated cost of higher education and lack of funding facilities. Students who live outside of large metropolitan centers are often ignored by college recruiters and do not get the proper information about selective schools. This leads to widespread "under-matching' for many low-income rural students, in which they end up at local or community colleges that are lower in academic rigor than universities of higher standing in which the students' achievement levels would be matched.**[2]**

SES *vs.* course selection- As a teacher my experience with the students of low SES at college level reveals that they do not take up courses in science, technology, designing, fine arts and engineering. However their enrollment is more in arts and humanities subjects, vocational and non professional courses because of less cost and investment. Based on a primary survey in rural Punjab it was found that as high as three-fourth of total students from rural background studying in different professional education programmes belonged to forward castes, leaving only one-fourth of total space for the socially disadvantaged sections of the society**[3].**

SES *vs.* region -Students from least represented areas of the country are less likely to go for higher education than those who reside in more advantaged places. This is because students who reside in urban areas and more advantaged areas like cities and towns benefit from information and guidance that they receive from educated parents, teachers and various networks. Students who reside in rural areas and are from more disadvantaged background are less likely to experience these benefits as they do not have many options to choose. Prospective college students from low-SES backgrounds are less likely to have access to informational resources about college **[4]**. In the age group of 22-25 years 15% of northern region, 13% of Southern region have access to higher education among low SES. In the north central region the number is just 10%for men and 6% for women. In the North east region it is 8%for men and 4% for women **[5].**

SES *vs.* social groups- The disparities in higher education are visible in relation to gender, caste and religion. Participation of scheduled castes and scheduled tribes in higher education has increased over time, but the increase is half of the participation of non-scheduled population in 2004. A study using NSSO data concludes that Hindu upper castes have higher probability of participation in higher education and Muslims and other backward classes have lowest chances**[6].** Other Backward Classes, Scheduled Classes and Scheduled Tribes account for 38, 33 and 23 per cent of scholarships respectively, leaving only 2 per cent for the financially weak and 0.7 per cent for merit based on "to work for wages or salary' and another five per cent for "other economic reasons'**[7]**

SES *vs*. career aspirations- Higher education attainment of poor youth has shown a marginal increase in the recent years. But their aspirations still remain below those of the other youth. It has been identified that students from low socio-economic status backgrounds hold lower career aspirations and that outreach activity [8]. Those from higher social class backgrounds tend to be more successful in developing career aspirations and are generally better prepared for the world of work because of access to resources such as career offices, guidance counselors, better schools, high level "social actors,' and familial experience with higher education [9].

SES *vs.* affordability- Students from low SES invests less in higher education as they cannot afford uncontrolled increase in fees. Institutes of higher education do not provide sufficient financial aid such as stipends, grants and tuition waivers for the students of low socioeconomic status. This leads to increase in dropout rate and they are less likely to complete 4 years of university education. For many students from disadvantaged socioeconomic backgrounds, the challenge is not getting into college, but getting out with a degree **[10]**. There is wide gap between the college attendance rates and completion of higher education and this gap is higher particularly for the students of low income families in India. It is the responsibility of the government to provide good quality higher education to the students of low SES at a reasonable cost.

SES *vs.* reservations- *The Constitution (103ʳᵈ Amendment) Act, 2019, provides for 10% reservation for the economically weaker sections (EWS) in higher educational institutions within the general category.* The reservation will be in addition to the existing 50% reservation in favour of the Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs), and will take the total reservation to 60%. Although government provides reservation to EWS and spends crores of rupees to increase the enrollment of

disadvantaged students in colleges, no major effect could be found. Instead of reserving the seats based on caste, a law has to be aimed to give admission to at least 20% of the students from low SES in all the public and private institutes of higher education.

Conclusion

The barriers the socially disadvantaged youth experience in their participation in context to Indian higher education continues to be marginalized. Although their access to higher education has increased from time to time, this growth is unable to fill the gap between them and their counterparts. The deteriorating climate of Indian economy may pose extra challenge to identify ways of reducing the negative impact of SES on higher educational adjustment. It is very much essential that the government and the universities should work together to foster the needs of socially disadvantaged students in higher education. Appropriate policies should be framed and implemented to end the disparity between the representation of students in higher education from low and high SES and should aim at creating more equal society.

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ICT in Higher Education-Contribution, Concerns and Challenges

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ABSTRACT

Technology is playing an important role in modernizing global education systems. With the assistance of technology, teachers and students can both improve their learning and refine skills necessary for tomorrow. The purpose of this paper is to briefly describe the advantages of different technological tools in teaching learning process and to highlight certain issues in their use.

Keywords*: Information and Communication Technology; Education; Teacher; Learner.*

Introduction

Technology has made a big impact in the classroom. As technology becomes more readily available in schools, the role of teacher changes to facilitator "through the thoughtful integration of student centered methodologies and computer based technology'. As a facilitator of knowledge, teacher can teach students to become active 21st century learner and to "seek, find and assimilate data' from various sources.

Information and Communication Technologies is defined as a "*Diverse set of Technological tools and resources used to communicate, and to create, disseminate, store and manage information'* (Blurton, 2010). The new digital ICT is not single technology but combination of hardware, software, multimedia, and delivery systems. These technologies include computers, internet, broadcasting technologies (radio and television), and telephony. The use of technology in education has brought drastic change in the concept of education. The innovation lies not in the introduction and use of ICT, but in its role as a contributor towards a student-centered form of teaching and learning. It has made teaching learning process very interesting and easy both for the teachers as well as the learners. ICT in education has the potential to bring about influential changes in ways of teaching. ICTs need to be seen as "an essential aspect of teaching's cultural toolkit in the twenty-first century, affording new and transformative models of development that extend the nature and reach of teacher learning wherever it takes place' (Leach, 2005).

Integration of ICT in Education

The integration of information technology into the teaching and learning strategy can only be successful if it is carefully planned, managed and supported. There are three phases in the successful integration of ICT into teaching and learning. The phase one consists of the establishment of institution-wide technological infrastructure and the bottom-up institution-wide adoption of ICT in teaching and learning activities. Second phase is the pedagogical use of the infrastructure and the effective integration of ICT into teaching and learning activities to improve learning. Third phase is the strategic use of ICT with a view to the different target groups of higher education. The goal in this stage is to integrate the different elements of the technological enterprise into a "seamless educational enterprise' (Collis and Vander Wende 2002).

Advantages of Using ICT in Teaching And Learning

New technologies make it possible for complicated collaborative activities of teaching and learning by dividing it in space and time, with seamless connectivity between them. Due to its capability to offer anytime and anywhere, access to remote learning resources, ICT is a potentially powerful tool for offering educational opportunities.

Kler (2014) in a study explained benefits of using ICT in teaching learning process as under:

ICT helps to motivate and engage learners: The needs of every individual learner are different. ICT fulfils the needs of individual learner and also helps them in their learning by motivating them to learn and in this way the learners learn better and in a more effective manner.

Assessment of learners: ICT can guide the learner and the teachers by providing them feedback through feedback software which tells them about their mistakes side by side during the learning process.

Effective presentation: The learning material can be presented more effectively through ICT. It makes the material more presentable and hence enhances the interest of the learner and thus results in good learning.

Communication channels increased: Through ICT, distance never remains an issue as the learners and educators can share their views, ideas through emails, discussion groups and chat rooms.

Flexibility: ICT is flexible and it can be adjusted according to the ages and abilities of the learners and also according to the skills and competence of the educator, which makes teaching learning process effective.

ICT opens up new opportunities in teaching and learning: ICT provides an opportunity to the educators to develop new ways and methods for making learning more effective and provides the educators an opportunity to educators to learn new skills and polish their career more.

Autonomous learning: The use of ICT will change the role of the teacher as well as the learner to a great extent. ICT will provide students a wide choice regarding how they approach their study, without the direction of the teacher and hence minimal teacher management.

Types of technologies to be used in future classroom

There are many new technologies being used in classrooms today: social networking, online teaching, class blogs and wikis, podcasting, interactive whiteboards, and mobile devices (Cuttance, 2001). There are many ways in which we can benefit from the new technologies being developed today.

The use of word, Excel, Access, PowerPoint, Outlook and the Apple equivalent can all be implemented to enhance the learning of the content covered in class. Students use computers to complete their assignments, do their research, and connect with their classmates. Teacher use computers to keep track of their students, check on their work, and make grading easier and more transparent. The specific subject software such as Data Logging for Science, Mathematics software games, GIS for Geography, image manipulation software for Visual Art, special programs for Languages to name a few.

The invention of the internet only made the explosion of information even faster. Everything happens in real-time. The internet is the new consciousness in today's society. Now we can blog or tweet about anything and have it spread like wildfire in mere seconds. Blogs are like online journals with posts that date based, archived and enable a degree of interaction through the use of comments, pingbacks and trackbacks.

Open source software has enabled the development of Learning Management Systems (LMS) and content management systems such a Module which have capacity for forums, instant messaging and online

submission of work and the marking of such work. There is a lot of potential to assist teachers with the management of their own work by using such a system.

The use of audio files is not new but with the development of digital recorders, iPods and mp3 players it has become easier to create, stream and listen to audio files. Podcasts are the broadcasting of audio files using software supported by RSS feeds. When the audios have been made they are broadcasted by RSS feeds. Often a web page is associated with the podcasts and you can get them manually.

Concerns teachers have about the use of technology

There are various concerns and problems of integrating the information and communication technology with teaching learning process. Several concerns emerged from the interviews of teachers in a study by Scott (2002).

The problem most often noted by teachers was the maintenance of the equipment needed to operate a technologically enhanced school. Another frequently mentioned problem was the disparities between students who have access to computers at home and those who do not. Teachers provided evidence of the importance of the efforts in-school to promote professional development in integrating information technology into classroom teaching. The professional development days held and the flexible mentor type training available at the school was viewed as being very important by the teachers interviewed.

Teachers recognized that sometimes students are overwhelmed with the amount of information available and with the task of filtering through the information. Teachers have a hard time keeping up with the pace of change. One teacher raised the problem of increased plagiarism because technology was making it easy to reproduce and revise someone else's work.

Another emerging issue is the possible loss of control of the education process to business partners. Balancing the interests of these partners and that of the students might be an increasingly challenging role for administrators as business involvement in education becomes more common. Teachers stated that information technology was placing more demands on their time. Teachers noted that extra time was needed to learn new software and also to create new things for teaching because greater expectations were being placed on them.

Conclusion

There is accelerating natural evolution of ICT technologies. And all this has positively affected the learning of the students as the students show great enthusiasm in learning through ICT. But there is need to motivate teachers to use ICT in teaching learning process. The barriers can be checked through certain implications by the school and the teachers for making ICT a success in the teaching learning process.

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Brain Based Learning in Higher Education

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ABSTRACT

Brain based leaning is an educational approach based on the assumption that brain learns best when it learns naturally. It is the inter relationship between Psychology, Pedagogy and Neuroscience. It takes discoveries in the brain sciences and applies them to educational policy and teaching approaches. Rooted in three basic elements of relaxed alertness, Orchestrated immersion and Active processing, it is a promising approach to provide meaningful learning experiences to the learners in relaxed and threat free environment, shifting the paradigm from rote learning to meaningful learning. The present paper explores the studies conducted on brain based learning in context of higher education.

Key words: *Brain based learning, higher education, academic achievement*

From ancient times to the present era ultimate goal of all education is learning, which enables the learner to be better equipped to sustain the life in best possible ways. Sadly, in present times, learning has increasingly reduced to mugging up of the information and has become synonym of academic achievement. The result is that people entering the work field are apparently having good academic record but poor understanding of the things. This can be attributed to the faulty education system and leads to question what lacks in our education system which is hampering the development of critical mind. This demands education to make learning related with life and it can happen when learning happens naturally. Brain based leaning is a promising educational approach based on the assumption that brain learns best when it learns naturally i.e. the way it is designed to learn (Slavkin, 2004). It is based on the fact that each brain is unique and hence the leaning needs to be as per the learner. Brain based learning is the inter relationship between Psychology, Pedagogy and Neuroscience. It takes discoveries in the brain sciences and applies them to educational policy and teaching approaches. The aim is not only to provide educators with a scientific basis for understanding some of the best practices in teaching but also to offer new ways of looking at problems teachers grapple with every day. Brain Based Learning has its based in three fundamental elements which are- Relaxed alertness- where the a threat free and challenging environment is provided to the learner; Orchestrated immersion- in which the enriching learning experiences are provided to the learner so that they are completely immersed into learning and Active processing- where opportunities are created for the learners to apply the knowledge they have gained. Brain based learning promises to be the holistic approach for effective teaching learning process. It has shown promising results in school education. Need is being felt to implement this approach in higher education as well and it is gradually gaining momentum. The present paper looks into the review related with brain based learning in higher education.

Fathima (2008) studied the effect of meta-cognitive intervention strategies in enhancing teaching competency of B.Ed. students. The study was conducted on 30 B.Ed. trainees from Algappa University College of Education, Karaikudi, Tamilnadu. The students were taught using meta-cognitive intervention

strategies for two weeks. Analysing the post testsscores indicated that meta-cognitive orientation and teaching competency of B.Ed. students increased significantly by intervention.

Bowersock (2009) in his study depicted that the work of Montessori and Jensen had been used to solve the problems of non-native adult learners of English. The researcher did not verify the use of brain based learning through statistical testing, but he advocated that when brain based learning approach is used it can help significantly to encourage adults to learn English as a second language.

Duman (2010) investigated the effects of brain based learning on the academic achievement of students with different learning styles. The experimental study was conducted on 68 third-year Social Sciences Teacher Education students (2006-2007) of Mugla University. It was observed that brain based learning significantly increased the academic achievement as compared to the traditional teaching approach. No significant differences were observed among students with different learning styles of experimental group on academic achievement.

Huen and Chan (2010) attempted to explore the effectiveness of brain based intervention strategies in motivating and enhancing student learning. 149 female students studying in local girls' college of Hong Kong were divided into four classes. The results of the study showed that higher motivated learning outcomes were achieved by the experimental group as compared to the control group. Use of learning strategies increased in both the groups with experimental group exhibiting more usage of strategies than their counterparts.

The aim of the study conducted by Haghighi (2012) was to investigate the effect of brain based learning on academic achievement and retention of English language. The study lasted for total of 63 class hours spread over a period of 16 weeks with 50 male students pursuing BA at Civil Aviation Technology College, majoring in Aircraft Maintenance and Repair in Tehran, Iran.. The findings showed significant difference in academic achievement and retention of the experimental and control group, where the experimental group outperformed the control group.

Lago and Seepho (2012) investigated the effect of Brain Compatible Activities (BCA) for English as Foreign Language (EFA) vocabulary learning and retention. The study was conducted on 31 third year undergraduate students studying English for Tourism in Northeast province of Thailand. The results indicated significant increase in scores of the target words and delayed post testswhen taught using brain compatible activities.

In their investigation, Seyihoglu and Kaptan (2012) attempted to explore the effect of brain based learning approach on attitude and achievement in Geography among Elementary Teacher Candidates. 131 first-year students of academic session 2008-2009 at Rize University studying in Department of Primary School Teaching of Education Faculty participated in the study. It was concluded from the study that brain based learning approach had positive impact on teacher candidates' attitude and achievement in Geography.

Kosar and Bedir (2018) carried out a research to study the effect of brain based learning on language knowledge retention among young adult learners of Turkey. The study was conducted on 27 young adult learners enrolled in prep school education in state university. The findings of the study showed increase in proficiency level and retention of the participants after the intervention. The qualitative analysis of the data indicated that about 82% participants stated that brain based lessons were more effective than traditional lessons.

The review of related literature on implementation of brain based learning in higher education revealed that it is an effective approach and has a positive impact on adult learners. The review also hinted that most of the studies using Brain Based learning in higher education have been conducted out of India. Within the country, Brain Based Learning is slowly gaining momentum at elementary level and higher

secondary level, but is still in the very nascent stages. The research on Brain Based Learning indicates that irrespective of the age group of learners, the teachers who implement brain-based instructional strategies in classrooms, are able to positively impact them on social, emotional and cognitive levels in a better way. Brain Based Teaching yields three important effects on learners and learning process. Firstly, the learners are able to understand their own learning process since they are actively involved in it. Secondly, they discover that learning depends on their ability to externalize their knowledge rather than focusing on marks they get in their exams. Finally they understand that knowing how to learn will support their studies and hence achievement. It is a very promising approach and should be implemented at higher education levels, which will make learning a joyful and meaningful experience for the learners. This will shift the paradigm from current state of being achievement oriented to learning in real sense of it.

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Managing Innovation in Higher Education:
An Overview of Best Practices

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Introduction

The quality of higher education system in the education circle determines the quality of future innovative leaders and their impact on the quality of Higher Education. The need to have best practices to leverage the process of institutional success is imperative for the overall growth and reducing future uncertainties amongst the minds of the students. New and innovative programs are significant for sustainability of an institution in the present scenario. These innovations should be a vital part of the strategy formulation to achieve the institutional mission. There is a need to develop network to provide advice to college and university faculty as well so that they can help in improving the higher education system. These networks can help teachers enhance their teaching skills and move towards deep learning so as to help students get a command over the concerned area of specialisation. The improved use of Technology and teaching with interactive open educational resources (iOERS) can help boost education system. However, without the human connection there cannot be any purpose to any teaching thus there is a need to collaborate the use of Technology with the human intellect. In today's world where along with internet and other social media there are many distractions for students some new ways in teaching should be developed which may be of much use to improve the teaching learning process.

Objectives

Present paper is a humble attempt to study some best practices that can be used in education sector so that the teaching learning process can be enhanced.

Innovative Teaching Methods

A few innovative teaching methods which can be used to improve the level of learning among students are discussed in the following paragraphs.

Simplifying Grading System

In order to change our current teaching learning scenario we must try to simplify our current grading system. In our current grading system emphasis is laid on more and more grades without taking into consideration the actual learning of the students. The present grading system forces the teachers to teach only the prescribed syllabus and that too in limited period which don't allow the teachers to go outside the packed curriculum. So the students are not able to go outside the preview of the specified syllabus. Thus such efforts should be made to change our grading system where teachers and students should not be under the fear of getting good grades for their promotions/future. One of such innovative grading system may be theuse of TOKEN system as suggested by NEA(National Education Association, USA). Under this system the students can earn 'tokens' by submitting the work early, doing some additional

work, getting full attendance, doing some extraordinary work or reaching the class in time. Such tokens can be used for getting the rewards at the end of the course or these tokens can be redeemed for dropping low grades in some other assignments etc. Such system will be much helpful in grading the performance of the students and will be easier for teachers to handle.

Interactive Lecturing

Interactive Lecturing is basically a process which combines the benefits of lecture method as well as active learning. As we know the lecture method have benefits like presenting proper information to the students regarding the topic but it is also possible that the students might not altogether listen to the lecture. So Interactive Lecturing is the best way to make boring lectures interesting by catching the attention of the students through their active involvement in the classroom. This can be done by the use of audio visuals, power point presentations, flipcharts, white boards or handouts. With such techniques a simple lecture method will become Interactive Lecture with lot students' involvement. But this technique should not be overused as studies have proved that extra use of boring slides and other material will distract the students from the main goal.

Evidence based Instructions

Researchers have proved that Evidence based Instructions shoe impressive results including clear improvement in students' learning, change in attitude towards the subject matter and consistent and improved academic results. In Evidence based Instructions the teacher need not to use the new material but the teacher should use the methods which have already been tested and trusted by the colleagues or some other persons. To have more idea of evidence based instructions you must visit other teachers' classes to get the idea of how they are teaching, you can watch video examples to have a wide idea of classroom cases being used by different organisations. In this way Evidence based iInstruction swill help the teacher in giving his/her best to the students.

Use of Technology and iOERs

The use of technology can help boost the level of the students. Tools like Google Duo offer a perfect platform to enhance effectiveness of group projects. Visual Reality(VR) in higher education classrooms has a lot of potential to assist learning through visualisation specifically for medical students. The increased use of IT in education field can prove to be integral in improving student learning outcomes. Adaptive learning projects like by IBM Watson are already being used in Universities to create a perfect blend of data with Artificial Intelligence.Video Conferencing Technology can also help boost the learning opportunities particularly in the rural areas. This can enable remote learners to be a part of the diverse learning programs and take part in important interactions by installing HD displays and cameras.

The use of iOERs (Interactive Open Educational Resource) can help capture our students'attention. It is a known fact to all of us today that our students although are physically present in the classroom but they are mentally millions of miles away. With their attention diverted by increased use of laptops, Smartphones and Tablets students are hardly able to concentrate on what their professors are teaching. The solution to this problem can be to adopt Activity Based Learning Model ie the Classroom Flip.(Inverted Classroom,Bishop J.L.,& Verlenger, M.A., 2013) Through this approach students can be asked to review their subject content with the use of various digital devices available with them before entering the classroom and then the students are free to take part in group discussions role plays etc.

Aggregate Project Planning

To improve the quality of Higher Education it is imperative to start focusing on innovation. Innovation alone is not sufficient, more importantly it is necessary to formulate a strategy as to which areas to focus upon. The resources should to be allocated across different projects. There should be a mix of

innovations which are Discovery driven that can reduce costly failures and help in long-term success of the Institutions. The innovations that are being done at the grassroot level in the Universities and Colleges should be properly supported by the sponsoring Agencies at the Macro level.There is a need to synchronise the goals at the institution level and at the Macro level .Usually their goals vary ,that is when the resources are wasted because they are trying to move towards different goals. There should be Aggregate Resourse Planning i.e. Innovations formulated at macro level should be adopted by the institutes and universities as well.

Conclusion

There hasn't been much research work on how good the professors teach or how much the students are able to grasp and retain. It requires not only reforms but a lot of resources and finances to bring about a radical change in the higher education system. The suggestions given through this paper highlight certain Best Practices that if adopted can lead to realisation of goals of providing quality higher education in the future times to come. Moreover use of technology and social media in teaching learning process can do wonders as we know students now a days are connected to both these things. So we must reach our students where they are i.e. social media if we really want to leverage the benefits of this media to meet our needs as well as that of oue students'.

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उच्चतर शिक्षा में संगीत के माधयम से जीवन स्तरोन्नति

प्रियंका शर्मा

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सार

मानव जीवन की कुछ ऐसी आवश्यकताएं जिनके बिना वह अधूरा है। उन्हीं आवश्यकताओं में से एक है शिक्षा। शिक्षा हर राष्ट्र के लिए विकास और सशक्तिकरण का आधार है। उच्च शिक्षित व्यक्ति अपने अधिकारों तथा जिम्मेदारियों के बारे में अच्छी तरह से जानता हैं। प्रतिकूल समय के दौरान शिक्षित व्यक्ति को यह पता होता है कि कैसे उसे परिस्थितियों का सामना करना है। अच्छी शिक्षा जीवन के प्रति हमारे दृष्टिकोण को बदलती है और हमें आशावादी बनाती है। इस व्यस्त भीड़भाड़ और भ्रष्ट संसार में हर कोई एक दूसरे को हानि पहुंचाना चाहता है। ऐसे समय में उच्च शिक्षित व्यक्ति ही नहीं बल्कि अशिक्षित व्यक्ति भी संगीत के द्वारा अपने मस्तिष्क को राहत पहुंचाता है और सही निर्णय लेने में सहायक सिद्ध होता है। बढ़ती उम्र का दबाव हो या किशोरावस्था का प्रतिबल, प्रत्येक प्रकार की चिंता को कम करके संगीत मस्तिष्क में कंपन कर शक्ति प्रदान करता है। संगीत हमारे मस्तिष्क पर सकारात्मक तथा सात्विक प्रभाव डालता है। अतः उच्चतर शिक्षा के माध्यम से विद्यार्थी अपने जीवन के बौद्धिक ज्ञान, तार्किक ज्ञान, वैज्ञानिक ज्ञान व संवेदनशीलता को उन्नत कर अपनी जीवनशैली एवं जीवन को और अधिक सक्षम एवं सुदृढ़ बना सकता है।

परिचय

मानव जीवन की कुछ ऐसी आवश्यकताएं हैं जिनके बिना वह अधूरा है। उन्हीं आवश्यकताओं में से एक है शिक्षा। शिक्षा हर राष्ट्र के लिए विकास और सशक्तिकरण का आधार है। शिक्षा आज की दुनिया की दैनिक गतिविधियों को समझने और इसमें भाग लेने में महत्वपूर्ण भूमिका   निभाती है। एक शिक्षित व्यक्ति वह नहीं जो कि स्कूल जाता है, कॉलेज जाता है, बल्कि वह है जो स्थिति और साधनों के साथ उनका सही चुनाव करता है, सही निर्णय लेता है और सदुपयोग करता है। आज के समय में एक अच्छी शिक्षा के बारे में जानना बेहद जरूरी है। एक अच्छी शिक्षा केवल डिग्री प्राप्त करने के लिए नहीं होती है बल्कि अपने जीवन में उत्तम सोच के स्तर को बढ़ाने से होती है।

उच्चशिक्षित व्यक्ति अपने अधिकारों तथा जिम्मेदारियों के बारे में अच्छी तरह   से जानता है। शिक्षित व्यक्ति जानता है कि यह उसका अधिकार है और उसकी जिम्मेदारी है कि वह चुनाव में अपनी शक्ति का प्रयोग करे जिससे एक अच्छे राष्ट्र का निर्माण हो सके। प्रतिकूल समय के दौरान शिक्षित व्यक्ति को यह पता होता है कि कैसे उसे परिस्थितियों का सामना   करना है। वह सामाजिक बुराइयों से लड़ने में सक्षम होता है। शिक्षित व्यक्ति पर्यावरण के प्रति भी जागरूक होता है।

जीवन को सफल बनाने के लिए एक अच्छी शिक्षा का होना आवश्यक है। अच्छी शिक्षा जीवन के प्रति हमारे दृष्टिकोण को बदलती है और हमें आशावादी बनाती है। शिक्षा केवल सूचनाओं के आदान प्रदान और पूर्व निर्धारित निर्देशों के बारे में ही नहीं है, बल्कि यह एक प्रवेशद्वार है जो हमारी रचनात्मक और कल्पनाशील क्षमताओं को खोलता है।

इस व्यस्त भीड़भाड़ और भ्रष्ट संसार में हर कोई एक दूसरे को हानि पहुंचाना चाहता है, ऐसे कठिन समय में

उच्चशिक्षित व्यक्ति ही नहीं बल्कि अशिक्षित व्यक्ति भी संगीत के द्वारा अपने मस्तिष्क को राहत पहुंचाता है और सही निर्णय लेने में सहायक सिद्ध होता है। जीवन में संगीत स्वयं को प्रसन्न रखने का एक सक्षत्त माध्यम है। यह हमारे शरीर व दिमाग दोनों को लाभ पहुंचाता है। आधुनिक जीवन शैली में मानसिक दबाव से दिमाग पर काफी बुरा असर पड़ रहा है। इसके परिणाम स्वरूप हम खुद को एकाकी महसूस कर मानसिक रोगों की गिरफ्त में आते जा रहे हैं। दिमाग को चुस्त रखने के लिए निश्चित समय पर विश्राम के साथ मनोरंजन भी मानसिक स्वास्थ्य के लिए महत्वपूर्ण होता है। बढ़ती उम्र का दबाव हो या किशोरावस्था का प्रतिबल, प्रत्येक प्रकार की चिंता को कम कर के संगीत मस्तिष्क में कंपन कर शक्ति प्रदान करता है।

अक्सर हमने देखा है कि रोते हुए बच्चे मधुर संगीत सुन कर सो जाते हैं जिससे हम जानते हैं कि संगीत हमारे मस्तिष्क पर सकारात्मक तथा सात्विक प्रभाव डालता है। अतः उच्चतर शिक्षा के माध्यम से विद्यार्थी अपने जीवन के बौद्धिक ज्ञान, तार्किक ज्ञान, वैज्ञानिक ज्ञान व संवेदन शीलता को उन्नत कर अपनी जीवन शैली एवं जीवन को और अधिक सक्षम और सुदृढ़ बना सकता है।

मनोचिकित्सा के अतिरिक्त संगीत विद्यार्थी के मनःस्थिति को ठीक करके जीवन की गुणवत्ता में भी सुधार करता है। संगीत नकारात्मक विचारों को साफ करके नई सकारात्मक ऊर्जा द्वारा उमंग के साथ जीवन जीने के लिए प्रेरित करता है।

काम या जीवन में एक दूसरे से आगे बढ़ने की होड़ की वजह से दिमाग पर जोर पड़ता है तथा दिमाग की नसें ज्यादा थक जाती हैं। संगीत सुनने से दिमाग को आराम मिलता है। जहां पर कई बार दवाएं काम नहीं करती हैं वहां म्यूजिक थैरेपी काम करती है। अच्छा संगीत सुनने से दिमाग में चल रहे बेकार के विचारों को विराम मिलता है। आमतौर पर जिन लोगों को नींद नहीं आती उनको सोने से पहले कुछ देर अच्छा संगीत सुनना चाहिए।

आज के इस आपाधापी युग में जहां व्यक्ति निरंतर यान्त्रिक अभिकरणों के कारण स्वयं भी यन्त्रवत हो अवसाद व तनावग्रसित हो रहा है, ऐसे में संगीत उसके जीवन को स्तरोन्नत करने की दिशा में सहायक सिद्ध होगा। अतः उच्चतर शिक्षा में यदि संगीत को सही ढंग से व्यव्हारित किया जाए तो एक विद्यार्थी अपने जीवन को स्तरोन्नत कर अपने बौद्धिक, तार्किक व वैज्ञानिक दृष्टिकोण को उन्नत कर एक संवेदनशील नागरिक बन राष्ट्र के उत्थान में सहायक सिद्ध हो सकता है।

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उच्चतर शिक्षा में हिंदी विषय के माध्यम से व्यवसायिक उन्नति

संतोष कुमार ठाकुर

सहायक प्राध्यापक(हिंदी)

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सार

हिंदी भाषा में रोजगार की अपार संभावनाएं हैं। हिंदी में रोजगार के अवसरों को जानने से पूर्व अगर आप इन तथ्यों पर नजर डालें तो पूरा परिदृश्य स्पष्टहो जाएगा। हिंदी दुनिया की दूसरी सबसे ज्यादा बोली जाने वाली भाषा है। इस समय दुनिया में हिंदी बोलने वालों की संख्या 55 करोड़ से अधिक है वही हिंदी समझ सकने वालों की संख्या करीब 1 अरब है। प्रिंट मीडिया, इलेक्ट्रॉनिक मीडिया, इंटरनेट, राष्ट्रीय और अंतरराष्ट्रीय मंच और संस्थाओं में हिंदी के प्रयोग में गुणात्मक वृद्धि हुई है।

परिचय

शिक्षाजीवन पर्यन्त चलने वाली प्रक्रिया है जो बालक के जन्म लेने सेलेकर उसकी मृत्यु तक निरंतर चलती रहती है। शिक्षा मनुष्य के विकास की पूर्णता की अभिव्यक्ति है। शिक्षा स्वयं को पहचानने व अपनी शक्तियों को पहचानने की क्षमता का विकास है। शिक्षा मनुष्य के अंदर सद्गुणों को विकसित करती है। शिक्षा से मनुष्य के अंदर नए विचारों, आकांक्षाओं का जन्म होता है। शिक्षा की बदौलत मनुष्य अच्छेबुरे के भेद को पहचान पाता है। शिक्षा ही वह मूल वस्तु है जिसके सहारे मनुष्य आगे बढ़ता है। इसी कारण मनुष्य संसार के अन्य प्राणियों में श्रेष्ठ है। यदि शिक्षा ना हो तो मनुष्य भी उसी जानवर के समान होता है जिसे अच्छे बुरे का कुछ भी पता नहीं रहता और उसकी बौद्धिक वृद्धि नहीं हो पाती।

उच्चतर शिक्षा का अर्थ है सब को दी जाने वाली शिक्षा से ऊपर किसी विशेष विषय या विषयों में विशेष, सूक्ष्म शिक्षा। यह शिक्षा के उस स्तरका नाम है जो विश्वविद्यालयों, व्यवसायिक विश्वविद्यालयों, कम्युनिटी महाविद्यालयोंकॉलेजों एवं प्रौद्योगिकी संस्थानों आदि के द्वारा दी जाती है। प्राथमिक एवं माध्यमिक के बाद यह शिक्षा का तृतीय स्तरहै जो प्रायरू ऐच्छिक होता है। इसके अंतर्गत स्नातक, परास्नातक एवं व्यवसायिक शिक्षा एवं प्रशिक्षण आदि आते हैं।

हिंदी भारत की राजभाषा है। राजभाषा हिंदी की अत्यधिक लोकप्रियता और बढ़ते अंतरराष्ट्रीय महत्व के साथ साथ हिंदी भाषा केक्षेत्रमें रोजगार के अवसरों में भी अत्यधिक प्रगति हुई है। केंद्र सरकार, अनेक राज्य सरकारों के विभिन्न विभागों में हिंदी अधिकारी, हिंदी अनुवादक, हिंदी सहायक जैसे विभिन्न पदों की बहुतायत है। निजी टीवी और रेडियो चौनलों की शुरूआत होने से रोजगार के अवसरों में अत्यधिकवृद्धि हुई है। हिंदी मीडिया के क्षेत्र में एंकर्स, रेडियो जॉकी, संपादकों, रिपोर्टरों, संवाददाताओं, न्यूज रिपोर्ट्स,प्रूफरीडर्स, टाइपिस्ट आदि की आवश्यकता रहती है।

हिंदी में रोजगार की इच्छा रखने वालों के लिए पवकारिता जन−संचार में डिग्री अथवा डिप्लोमा के साथ हिंदी में अकादमिक योग्यता रखना महत्वपूर्ण है। इस क्षेत्र में कलात्मक रूप में लेखन कीआवश्यकता होती है। लेकिन किसी व्यक्ति के लेखन में डिग्री या डिप्लोमा निखार ला सकता है। कोई भी व्यक्ति एक स्वतंत्र अनुवादक के तौर पर अपनी आजीविका संचालित कर सकता है। विदेशी एजेंसियों के माध्यम से भी अनुवाद परियोजनाओं के अवसर प्राप्त होते हैं।

हिंदी में स्नातककरने के बादकई प्रतियोगी परीक्षाओं में शामिल होकर बैंक, न्यायिक सेवा, सिविल सर्विस और स्टेट सर्विस के अलावा रेलवे, बैंक आदि में भी रोजगार के अवसर हो सकते हैं।

हिंदी विषय में प्रास्नातक छात्र केंद्रीय विद्यालयों और विभिन्न राज्यों के विद्यालयों में भाषा अध्यापक व प्रवक्ता बन सकते हैं। इसके लिए उन्हें प्रतियोगी परीक्षा में सफल होना पड़ता है। हिंदी विषय में परास्नातक करने के बाद समय–समय पर आयोजित होने वाली राष्ट्रीय पात्रता परीक्षा (NET) में सम्मिलित हुआ जा सकता है। इसमें अधिकतम अंक प्राप्त करने वालों को जूनियर रिसर्च फैलोशिप (JRF) प्रदान की जाती है। जिसके माध्यम से शोधकार्य (Ph-D) करने वाले छात्रों को प्रतिमाह 30, 000 छात्रवृति प्रदान की जाती है वहीं परीक्षा उत्तीर्ण करने वालों को महाविद्यालयों में सहायक प्रोफेसर और प्रोफेसर के रूप में नियुक्ति का अवसर मिलता है।

यह उल्लेख करना समाचीनहोगा कि विदेशों में भी भारत की संस्कृति को समझने की रुचि बढ़ी है। यही वजह है कि कई देशों ने अपने यहां भारतीय भाषाओं को प्रोत्साहन देने के लिए शिक्षण केंद्रों की स्थापना की है। भारतीय धर्म, इतिहास और संस्कृति पर विभिन्न पाठ्यक्रम संचालित करने के अतिरिक्त इन केंद्रों में हिंदी, उर्दू और संस्कृत जैसी कई भारतीय भाषाओं में पाठ्यक्रम संचालित किए जाते हैं। वैश्वीकरण और निजीकरण के इस दौर में अन्य देशों के साथ भारत के बढ़ते व्यापारिक संबंधों को देखते हुए अन्य देशों की भाषाओं की अंतर शिक्षा की आवश्यकता महसूस की जाने लगी है। इस वजह से अन्य देशों में हिंदी को लोकप्रिय और सरलता से सीखने योग्य भारतीय भाषा बनाने में काफी योगदान दिया है।

हिंदी आजसिर्फ साहित्य की भाषा नहीं, बल्कि बाजार की भी भाषा है।उपभोक्तावादी संस्कृति ने विज्ञापनों को जन्म दिया, जिससे ना केवल हिंदी का प्रयोग बढ़ा बल्कि युवाओं को रोजगार के नए अवसर भी मिले। बहुराष्ट्रीय कंपनियां इस बात से परिचित हैं कि भारत उनके उत्पाद का बड़ा बाजार है और यहां के अधिकतर उपभोक्ता हिंदी भाषी हैं। इसलिए उन्हें अपना उत्पाद बेचने के लिए उसका प्रचार– प्रसार हिंदी में करना पड़ेगा। बाजार की भाषा के रूप में हिंदी को स्वीकृति भले ही मिल रही है लेकिन यह व्यवस्था दीर्घजीवी नहीं रहेगी। इसलिए हिंदी के उपभोक्तावादी रूप के विकास की चुनौतियों को समझना होगा और इसे ज्ञान की भाषा के रूप में विकसित करना होगा, तभी इसका भविष्य सुरक्षित हो सकता है।

उच्चतर शिक्षा में जीवनस्तरोन्नति का माध्यम –संगीत

हेमराज चन्दे

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सार

हिंदी भाषा में रोजगार की अपार संभावनाएं हैं। हिंदी में रोजगार के अवसरों को जानने से पूर्व अगर आप इन तथ्यों पर नजर डालें तो पूरा परिदृश्य स्पष्ट हो जाएगा। हिंदी दुनिया की दूसरी सबसे ज्यादा बोली जाने वाली भाषा है। इस समय दुनिया में हिंदी बोलने वालों की संख्या 55 करोड़ से अधिक है वही हिंदी समझ सकने वालों की संख्या करीब 1 अरब है। प्रिंट मीडिया, इलेक्ट्रॉनिक मीडिया, इंटरनेट, राष्ट्रीय और अंतरराष्ट्रीय मंच और संस्थाओं में हिंदी के प्रयोग में गुणात्मक वृद्धि हुई है।

परिचय

आज के इस मानव वैश्विकरण के युग में जहां हर पल ज्ञान विज्ञान की नवीन विधियां विकसित होती जा रही हैं और समस्त विश्व केन्द्रियकृत होता जा रहा है। ऐसे में एक उच्चशिक्षित व्यक्ति भी इन यांत्रिक अभिकरणों की चपेट में आ यन्त्रवत कार्य करते करते अनेक प्रकार के तनावों व अवसादों से ग्रसित होता जा रहा है। यदि कोई आशा की किरण सम्भवतः दिखाई देती है तो वह किरण है – संगीत। संगीत – चिकित्सा, कला व विज्ञान का समन्वय है, संगीत के माध्यम से चिकित्सा पद्धति भारतवर्ष के प्राचीन ऋषि मुनियों की देन है। भारतीय भास्त्रीय संगीत में वह भक्ति है जिससे अनेकानेक रोगों जैसे –हापरटेंशन, डायबटिज़, ब्लड कैंसर, अस्थमा, सिरदर्द, माइग्रेन, अपच, कब्ज़, हृदय रोग, मनोरोग इत्यादि का निदान सम्भव है। संगीत के माध्यम से चिकित्सा की सबसे बड़ी विशेषता यह है कि संगीत चिकित्सा पद्धति में को भी साइड इफेक्ट अर्थात दुष्प्रभाव नही है यदि किसी कारणवश रोगी को लाभ नहीं भी हो पा रहा है, तब भी इसका उसके जीवन पर कोई दूसरा दुष्प्रभाव नहीं होता है।''

अतः संगीत आज के इस वैश्विक समाज में मात्र जीवन के प्रारम्भ से लेकर मृत्यु पर्यन्त तक के षोडश संस्कारों तक ही सिमित नहीं है अपितु आज संगीत शिक्षण संस्थाओं के माध्यम से विकसित हो एक विषय के रूप में पुरी तरह स्थापित हो चुका है। ऐसा विषय जो मात्र अपने सांगितिक वर्ग अर्थात शिक्षक, विद्यार्थी, कलाकारों तक ही सीमित नहीं अपितु हर वर्ग के श्रोता के मन को प्रफुल्लित कर उसके जीवन स्तर को और बेहतर बनाने में अपना महत्वपूर्ण योगदान दे रहा है।

ज्ञान विज्ञान व तकनीकी चमत्कारों ने जीवन के प्रत्येक क्षेत्र में क्रान्तिकारी परिवर्तनों का जन्म दिया है, जिससे सुविधाओं के साथ साथ कई चुनौतियों का भी पदार्पण हुआ है। जिससें संगीत कला भी अछूती नहीं रह पाई है। भारतीय संगीत की प्राचीन परम्पराएं व वैज्ञानिक आधार विश्व विख्यात है। जिसने संगीत के बौद्धिक व भावनात्मक स्तर को अपनी विशिष्ट परम्पराओं के माध्यम से विश्व संगीत में अपनी मजबूत पहचान बनाई है। ऐसे में संगीत को प्रभावशाली बनाने के लिए एक ओर संगीत शिक्षा को प्रारम्भिक शिक्षा से जोड़ कर सुदृढ़ करना होगा तो दूसरा ओर उसे उच्चतर शिक्षा में अन्य विषयों जैसे विज्ञान, मनोविज्ञान, इतिहास, ललित कलाओं, धर्म, दर्शन, गणित, समाज शास्त्र अत्यादि अनेकानेक विषयों के साथ अंतःसम्बन्ध स्थापित करने की आवश्यकता है।

संगीत शिक्षण में विज्ञान एवं मनोविज्ञान का महत्वपूर्ण स्थान है जो विषय की गहराई में उतरने के लिए उसके

शिक्षण में महत्वपूर्ण योगदान देता है। अतः संगीत शिक्षण के लिए उसके शिक्षकों व विद्यार्थियों की सोच वैज्ञानिक व मनोवैज्ञानिक होना अनिवार्य है। क्योंकि उच्चतर शिक्षण प्रणाली में वैज्ञानिक दृष्टिकोण के साथ साथ मनोवैज्ञानिक आधार पर जब शिक्षण दिया जाता है तभी वह शिक्षण सफल हो पाता है। यदि विस्तृत रूप से संगीत का उच्चतर शिक्षा में जीवन स्तरोन्नति के प्रभाव का दायरा बढ़ाना चाहते हैं तो निश्चित रूप से अन्तर्विषयी विचार संगोष्ठियों, कार्यशालाओं, पुनःश्चर्या कार्यक्रमों का आयोजन आपेक्षित है। ताकि संगीत विषय के विद्यार्थी अन्य विषयों को और अन्य विषयों के विद्यार्थी संगीत विषय में सटीक व प्रामाणिक जानकारी प्राप्त कर अपना ज्ञानवर्द्धन कर सकें। जिससे उच्चतर शिक्षण में चेतना का संचार हो सके। ऐसे आयोजनों के बार बार आयोजनों से विचारों का आदान प्रदान सुलभ हो जाता है और विचारों व तथ्यों की गहराई का अनुभव करना सुगम व सहज हो जाता है।

उच्चतर शिक्षा के माध्यम से किसी भी विषय में जीवन स्तरोन्नति तब तक सम्भव नहीं है जब तक वह विषय वैशिष्टियकरण को प्राप्त कर रोजगार उन्मुख न हो, जो कमोबेश सभी विषयों के लिए एक ज्वलंत समस्या है। हर युग में जीवन स्तरोन्नति के लिए जब तक विभिन्न कलाओं व विषयों को आजिविकापार्जन से नहीं जोड़ा जाता है तब तक वे सभी महत्वहीन रहती हैं। संगीत जैसे रूचिकर व आकर्षक विषय में रोजगार की अपार सम्भावनाएं हैं किन्तु उच्च शिक्षा में उन रोजगार के साधनों की ओर उन्मुख होने के लिए शिक्षण में विशेष प्रशिक्षण की सुविधाओं का अभाव है जिस हेतु इस क्षेत्र में रोजगार सृजित करने के लिए अन्य विषयों से सम्बन्धित हो शिक्षण अधिगमों पर गहन चिन्तन मनन करना होगा।

अधिकांश विद्यार्थी का एकाकी ध्येय संगीत शिक्षक का पद प्राप्त कर संतोष कर लेते हैं किन्तु उच्च शिक्षा में यदि विद्यार्थी की क्षमता, अभिरूचि व योग्यता के अनुरूप संगीत के विद्यार्थियों के विशेष प्रशिक्षण पर बल दिया जाए तो रोजगार के अनेकानेक अवसर सृजित किये जा सकते हैं। व्यवसाय के नई नई सम्भावनाओं को खोजा जा सकता है। व्यवसाय की इन सम्भावनाओं में कुछ पक्ष प्रत्यक्ष रूप से संगीत के विशिष्टिकरण व रोजगार परक दृष्टिकोण से जुड़े हुए हैं। जिनमें मंच प्रदर्शन, संगीत शिक्षा भास्त्रविद, अध्यापन, युगलबंदी (गायन वादन), वाद्यों की मुरम्मत, ध्वनि संयन्त्रों का समुचित प्रयोग इत्यादि भामिल किये जा सकते हैं, जिनके लिए प्रत्येक संगीत विभाग में प्रत्येक पक्ष से सम्बन्धित एक अनुभाग स्थापित कर सकते हैं। जैसे मंच प्रदर्शन अनुभाग में योग्य छात्रों को मंच प्रदर्शन की दृष्टि से तैयार कर मंच प्रदर्शन की मूलभूत आवश्यकताओं के अनुरूप उसको प्रशिक्षण दिया जाएगा। संगीत शिक्षा भास्त्रविद अनुभाग में उन शिक्षार्थियों का चयन किया जा सकता है जो संगीत के भास्त्र पक्ष में अधिक रूचि रखते है।इस दृष्टि से काशी हिन्दू विश्वविद्यालयों के प्रयास सरसहनीय हैं। अध्यापन अनुभाग में उन शिक्षार्थियों का चयन किया जा सकता है जो संगीत को व्यवसाय के रूप में अपनाना से सम्बधित कठिनाईयों एवं उनके समाधान की व्यवस्था हो सकती है ताकि अध्यापन के विभिन्न पक्षों को समझा जा सके ।शास्त्रीय संगीत में युगलबंदी की परम्परा नई नहीं हैं अतः इस युगल बन्दी अनुभाग में उन शिक्षार्थियों का चयन किया जा सकता है जो संगीत मिलकर गाने बजाने अर्था युगल कार्यक्रमों के प्रति रूझान रखते हैं।वाद्यों की मुरम्मत अनुभाग में उन शिक्षार्थियों का चयन किया जा सकता है जो भास्त्रीय संगीत में अपने वाद्यों को सुर करना, उसकी मुरम्मत कर पाना व वाद्यों की मुरम्मत सीखकर उसे व्यवसाय के रूप में अपनाना चाहते हैं।आज के इस वैज्ञानिक युग में ध्वनि संयन्त्रों अर्थात साउंड सिस्टम का एक कार्यक्रम की सफलता व असफलता में बहुत महत्वपूर्ण योगदान रहता है। ध्वनि संयन्त्र अनुभाग में उन शिक्षार्थियों का चयन किया जा सकता है जो साउंड इजिनियरिंग को अपना व्यवसाय बनाना चाहते हैं।

इन प्रत्यक्ष रूप से संगीत के विशिष्टिकरण व रोजगार परक पक्षों के अतिरिक्त अन्य पक्ष भी हैं जो अन्य विषयों के परस्पर सहयोग की दृष्टि से महत्वपूर्ण हैं जैसे – संगीत चिकित्सा, योग व ज्योतिष, ध्वनि विज्ञान, संगीत पत्रकारिता इत्यादि। संगीत चिकित्सा – आज के संदर्भ में संगीत के क्षेत्र में अनेकानेक प्रयोग किये जा रहे हैं जिनमें संगीत चिकित्सा मुख्य है। संगीत के द्वारा विभिन्न रोगों का निवारण करने के लिए कई सराहनीय प्रयास किये जा चुके हैं। यही नहीं ये प्रयास मात्र मनुष्य तक ही सिमित नहीं अपितु जीव–जन्तु व पेड़–पौधों पर भी संगीत के प्रयोग से कई आश्चर्यजनक परिणाम प्राप्त हो चुके हैं। अतः इस अनुभाग में चिकित्सक पद्धति का आधारभूत ज्ञान प्राप्त कर संगीत के साथ चिकित्सा सम्बन्धी प्रयोग को और अधिक व्यापक बनाया जा सकता है। संगीत व योग एवं ज्योतिष – संगीत के समन्वय से योग जो कि भारतीय प्राचीन परम्परा है, के द्वारा अनेक रोगों का प्राकृतिक निदान बिना किसी अन्य प्रभाव अर्थात साइड इफेक्ट के किया जा सकता है वहीं ज्योतिष के द्वारा जातक अर्थात व्यक्ति के ग्रहानुसार उस पर

संगीत के प्रभावों द्वारा समस्याओं का निराकरण किया जाता है। इस दृष्टिकोण को और अधिक विकसित कर एक अलग भाखा बना कर व्यवसायिक रूप से विकसित किया जा सकताहै। ध्वनि व संगीत –इस अनुभाग में संगीत के विभिन्न ध्वनि सम्बन्धी सिद्धान्तों की वैज्ञानिक व्याख्या सम्भव है जिसके लिए संगीत व भौतिक विज्ञान अर्थात फिजिक्स के सम्बन्ध स्थापित कर संगीत के ध्वनि (साउंड) तारता, आवाज का गुणधर्म, तार के कम्पन के आन्दोलन संख्या की वैज्ञानिक व्याख्या की जा सके। संगीत पत्रकारिता – आज के समय में मीडिया पत्रकारिता एक महत्वपूर्ण विषय है किन्तु शास्त्रीय संगीत से सम्बन्धित न होने के कारण अक्सर पत्रकार संगीत के कार्यक्रमों, पुस्तकों व कलाकारों के बारें में सही जानकारी नहीं दे पाते हैं। अतः ऐसे में संगीत से सम्बन्धित पत्रकारिता के लिए दोनों विषयों अर्थात संगीत व पत्रकारिता में समन्वय स्थापित कर एक अलग अनुभाग बनाया जा सकता है जो पत्रकारिता में संगीत की दृष्टि से व्यावसायिकता बढ़ाने में सहायक सिद्ध होगा।

अंततः उच्चतर शिक्षा के माध्यम से जीवन स्तरोन्नत करने में संगीत की एक विशिष्ट भूमिका है तो मात्र तनाव व अवसाद से ग्रसित मानव मन को उबारने में ही नहीं अपितु अपने वैशिष्टियकरण से रोजगार के अनके अवसर सृजित कर पाने में पूर्ण रूप से सक्षम है।किन्तु यह तभी सम्भव है जब संगीत को प्रभावशाली बनाने के लिए एक ओर संगीत शिक्षा को प्रारम्भिक शिक्षा से जोड़ कर सुदृढ़ करें तो दूसरी ओर उसे उच्चतर शिक्षा में अन्य विषयों जैसे विज्ञान, मनोविज्ञान, इतिहास, ललित कलाओं, धर्म, दर्शन, गणित, समाज भास्त्र इत्यादि अनेकानेक विषयों के साथ अंतःसम्बन्ध स्थापित करने हेतु उच्चतर शिक्षा में शिक्षार्थी की क्षमता अनुरूप इसके विभिन्न अनुभागों में प्रवेश प्राप्त कर अपनी योग्यताओं को बढ़ाकर व्यवसाय के रूप में संगीत को अपना सके । यह तभी सम्भव है जब यू०जी०सी०, केन्द्र व राज्य सरकारें अपने अपने स्तर पर समुचित प्रयास करें एवं उदार स्प से अनुदान व सहयोग देकर विभिन्न सेमिनारों, कार्यशालों, संगोष्ठीयों का आयोजन कर इस दिशा में सत्तत प्रयास करे तभी अभीष्ट लक्ष्य को प्राप्त किया जा सकता है।

उच्च शिक्षा के माध्यम से संगीत में व्यावसायिक क्षेत्र

अभय

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परिचय

संगीत आदिकाल से ही रस निष्पत्ति और भावनाओं को व्यक्त करने का माध्यम रहा है। 'स्वर' तथा 'लय', दोनों तत्वों का प्रभाव हमारे जीवन में पड़ता है। सनातन होने के कारण आदिम युगों से लेकर आज तक संगीत सामाजिक, धार्मिक, आर्थिक जैसे सभी क्षेत्रों की आवश्यकता की पूर्ति करता आया है। आधुनिक समय में संगीत के विस्तृत क्षेत्र में रोज़गार का दायरा बढ़ चुका है। आधुनिक उपकरणों के आने से तकनीकी क्षेत्र में भी विस्तार हुआ है तथा संगीत के इस विस्तृत क्षेत्र को संभालने के लिए नए–नए रोज़गारों की संभावनाएं अब बढ़ चुकी हैं। फलस्वरूप उच्च शिक्षा एवं योग्यता के आधार पर व्यवसाय का चुनाव किया जा सकता है।

संगीत का प्रमुख उद्देश्य ईश्वरोपासना ही माना जाता था। बदलते समय के साथ–साथ बढ़ती आवश्यकताओं की पूर्ति के लिए पूंजीवाद का सहारा लेना पड़ा। रोज़गार व व्यवसाय सोच का विषय बनने के उपरांत संगीत को केवल ईश्वरोपासना न समझ कर, उचित व्यवसाय का साधन भी माना जाने लगा। मध्यकाल में अनेक कलाकारों को प्रमुख शासकों ने राज्याश्रम प्रदान कर, कई संगीतज्ञों के लिए आजीविका का स्तम्भ खड़ा किया। स्वतंत्रता के उपरांत संगीत के प्रचार और प्रसार में गति आई है।

व्यवसाय के क्षेत्र

शिक्षण संस्थानों की यदि बात की जाए तो विद्यालय, महाविद्यालय और विश्वविद्यालय स्तर पर शिक्षक के रूप में कार्य किया जा सकता है। विद्यालय, महाविद्यालय और विश्वविद्यालय स्तर पर शिक्षक बनकर कार्य करने के लिए अलग–अलग प्रावधान हैं। महाविद्यालयों और विश्वविद्यालयों में मुख्य रूप से शास्त्रीय संगीत की शिक्षा दी जाती है। महाविद्यालयों और विश्वविद्यालयों में सहायक कलाकारों के पद भी होते हैं। समय–समय पर सरकार द्वारा इन पदों को भी भरा जाता है। इनमें हरमोनियम वादक, तबला वादक आदि पद शामिल हैं।

सूचना एवं जनसंपर्क विभाग के अंतर्गत सरकार द्वारा चलाई जा रही योजनाओं को गांव–गांव तक पहुँचाया जाता है। कलाकार गायन तथा वादन कर जन समूह को इकट्ठा करते हैं तथा सरकार द्वारा जारी की गई योजनाओं के बारे में लोगों को बताते हैं। समय–समय पर इस विभाग के कलाकारों के द्वारा सांस्कृतिक कार्यक्रमों और सरकारी कार्यक्रमों में कला का प्रदर्शन किया जाता है। प्रदेश सरकार द्वारा समय–समय पर इस विभाग के पदों को भरने के लिए अधिसूचना जारी की जाती है। अतः इस विभाग में भी संगीत शिक्षा प्राप्त कर लोक गायक के रूप में रोज़गार पाया जा सकता है। लोक संस्कृति से जुड़े वाद्य यंत्र बजाने वाले कलाकार भी इस विभाग में रोज़गार पा सकते हैं।

आकाशवाणी केन्द्र द्वारा संगीत के विभिन्न विधाओं जैसे शास्त्रीय संगीत, उपशास्त्रीय संगीत, सुगम संगीत तथा लोक संगीत में रुचि रखने वाले कलाकारों के लिए नैमित्तिक कलाकार के रूप में समय–समय पर अधिसूचना जारी की जाती है। इस प्रकार से आकाशवाणी केन्द्रों से रोज़गार पाया जा सकता है।

यदि विद्यार्थी कड़ी मेहनत करता है तो परिणामस्वरूप एक सफल मंच प्रदर्शक के रूप में अपना व्यवसाय शुरु कर सकता है। पूरे भारत में इनके कार्यक्रम प्रस्तुत होते हैं। गुणी कलाकारों द्वारा विदेश में भी कला का प्रदर्शन किया जाता है। अयोजकों द्वारा भिन्न–भिन्न विधाओं से जुड़े कलाकारों का मंच प्रदर्शन, कार्यक्रम या उत्सव के अनुसार करवाया जाता है। यदि बात करें फिल्मी संगीत की तो हमें यह ज्ञात होगा कि गीत की रचना करने में विभिन्न–विभिन्न वाद्य यंत्रों का प्रयोग किया जाता है। अतः गीत को वैसा ही पेश करने के लिए इन यंत्रों से जुड़े वादकों की सहायता लेनी पड़ती है। इस तरह से गायकों तथा वादकों को व्यवसाय मिलता है। आज के समय में संगीत की बहुत सारी विधाएं मौजूद हैं। ये विधाएं भिन्न–भिन्न प्रकार की रचनाओं को जन्म देती हैं। इन रचनाओं को आधार मान कर नर्तक अपनी कला का प्रदर्शन करता है।

समय–समय पर रक्षा विभाग द्वारा भी खाली पदों का भरने के लिए नेवी बैंड, पुलिस ऑर्केस्ट्रा, पुलिस बैंड इत्यादि में भर्ती होने के लिए अधिसूचना जारी की जाती है। इन सभी पदों को भरने के लिए वाद्ययंत्रों के अनुसार सर्टिफिकेट, डिप्लोमा और डिग्री का प्रावधान रखते हैं। इस प्रकार से हर एक पद के लिए अधिसूचना के हिसाब से सर्टिफिकेट, डिप्लोमा और डिग्री का महत्व होता है। महाविद्यालयों और विश्वविद्यालयों से शिक्षा प्राप्त कर रक्षा विभाग में रोज़गार पाया जा सकता है।

लेखक या संपादक के रूप मे भी कार्य किया जा सकता है। अच्छा साहित्य लिखकर, विभिन्न–विभिन्न भाषाओं को सीख कर, उनका प्रयोग नई रचनाएं बना कर, साहित्य और रचनाओं को पेपर और मैगज़ीन में लाक कर एक अच्छे व्यवसाय को जन्म दिया जा सकता है। एक अच्छा लेखक अच्छा साहित्य लिखकर युवा पीढ़ी को प्रभावित करता है। यह भी स्पष्ट करना आवश्यक है कि अच्छे–अच्छे संगीतज्ञ लेख लिख कर, रचनाओं का निर्माण कर युवा पीढ़ी को संगीत से जुड़ी बातों से अवगत करवाने का कार्य भी करते है। पत्र–पत्रिका के माध्यम से संपादक, अच्छे लेखों को विद्यार्थियों और आम जनता तक पहुँचाता है।

यदि व्यक्ति स्वर तथा ताल पक्ष से अच्छा है, भाव के आधार पर धुन बना सकता है, तो संगीत निर्देशक के रूप में कार्य कर अपने व्यवसाय को चुन सकता है। ताल पक्ष में महारत हो जाने से रचना को इच्छा अनुसार नया मोड़ दे सकता है। संगीत निर्देशक गीत या रचना की प्रकृति के अनुसार गायक तथा वादक का चयन करता है। फिल्म जगत में गीतकार का भी महत्व है। संगीत निर्देशक को गीतकार द्वारा ही शब्द मिलते हैं। यदि कोई व्यक्ति साहित्य, भाषा का प्रयोग भली भांति जानता है तो एक गीतकार के रूप में रोज़गार प्राप्त कर सकता है।

वर्तमान समय में रिकार्डिंग का प्रचलन काफी हद तक बढ़ चुका है। कलाकार अपनी रचना को रिकॉर्ड कर श्रोताओं के सामने प्रस्तुत करता है। इस क्षेत्र में कई नए–नए व्यवसाय खुल चुके हैं। रिकॉर्डिंग के पश्चात एडिटिंग, मिक्सिंग तथा मास्टरिंग की प्रक्रिया को किया जाता है। आज के समय में एडिटिंग, मिक्सिंग तथा मास्टरिंग के क्षेत्र में कई संभावनाएं हैं। उदाहरण के लिए यदि किसी एक गीत की रिकॉर्डिंग प्रक्रिया को देखा जाए तो यह ज्ञात होगा कि सबसे पहले शब्दों का चयन किया जाता है, उसके बाद स्वर तथा लय में शब्दों को बाँधा जाता है। शब्दों को बाँधने के पश्चात, गायक द्वारा किए गए गायन को रिकॉर्ड किया जाता है। वाद्य यंत्रों की सहायता से ताल दिया जाता है। इस प्रकार से भिन्न–भिन्न विधाओं से उत्पन्न रचना को तैयार कर एडिटिंग, मिक्सिंग तथा मास्टरिंग के लिए भेजा जाता है।

आज के समय में मँच प्रदर्शन का प्रचलन भी काफी हद तक बढ़ा है। मंच प्रदर्शन के लिए ऑडिटोरियम, हॉल और ओपन स्टेज का प्रयोग किया जाता है। मंच प्रदर्शन के दौरान साउंड ऑपरेटर की अहम भूमिका रहती है। इस प्रकार से साउंड ऑपरेटर जैसे व्यवसाय से रोज़गार प्राप्त किया जा सकता है। हर एक जगह जैसे ऑडिटोरियम, हॉल और ओपन स्टेज के लिए गायक, वादक और श्रोताओं की संख्या के अनुसार साउंड सिस्टम की भूमिका अलग–अलग रहती है। इस बात को ध्यान में रखते हुए गायकों, वादकों और वाद्य यंत्रों के अनुसार साउंड ऑपरेटर द्वारा साउंड सिस्टम सेट किया जाता है। इसके साथ ही मंच में प्रस्तुति दे रहे कलाकार को जिस प्रकार की साउंड सेटिंग चाहिए ठीक उसी प्रकार की सेटिंग को बनाने में साउंड ऑपरेटर का महत्वपूर्ण योगदान रहता है।

संगीत निर्देशक द्वारा रचित रचनाओं में, साउंड इंजीनियर द्वारा रचनाओं की गुणवत्ता को निखारने का कार्य किया जाता है। फिल्म की डबिंग प्रक्रिया, जिसमें आवाज़ की गुणवत्ता पर ध्यान दिया जाता है। नायक–नायिका की आवाज़ और गुणवत्ता को देखना, गायक की आवाज़, वाद्ययंत्रों की आवाज़, गायक की आवाज़ के अनुसार माइक, वाद्यों के हिसाब

से माइक का चयन तथा अंत में रचना की गुणवत्ता को निखारना यह सब कार्य साउंड इंजीनियर द्वारा किए जाते हैं।

आजकल ऑर्केस्ट्रा का प्रचलन भी बढ़ गया है। ज़िला, राज्य, राष्ट्रीय और अंतर्राष्ट्रीय स्तर के उत्सवों में ऑर्केस्ट्रा और बैंड का प्रचलन है। किसी चैनल में प्रसारित हो रहे किसी भी प्रकार के रियलिटी शो में ऑर्केस्ट्रा या बैंड का प्रयोग किया जाता है। सरकारी या गैर–सरकारी विभागों द्वारा संगीत से जुड़े पदों को भरने के लिए ऑर्केस्ट्रा या बैंड का प्रयोग किया जाता है।

निष्कर्ष –

ललित कलाओं में सर्वश्रेष्ठ ललित कला 'संगीत' है जिसके द्वारा रस की निष्पत्ति होती है। भावों तथा विचारों को व्यक्त करने का सशक्त माध्यम संगीत है। इसका आकर्षण और आवश्यकता आदिकाल से आज तक बनी हुई है। संगीत का समय के साथ विस्तार होने के कारण कई विधाओं का जन्म हुआ जिसके फलस्वरूप कई व्यावसायिक क्षेत्र सामने आ चुके हैं। पहले गायन, वादन और नृत्य के द्वारा ही आजीविका का स्त्रोत उत्पन्न किया जाता था, किन्तु आधुनिक समय में भिन्न–भिन्न उपकरणों के आने से संगीत के क्षेत्र में काफी विस्तार हुआ है। निश्चित रूप से युवा पीढ़ी द्वारा, उच्च शिक्षा एवं योग्यता के आधार पर संगीत से जुड़े सरकारी एवं गैर–सरकारी स्तर पर व्यावसायिक क्षेत्र का चुनाव किया जा सकता है।

संदर्भ

* www.granthaalayah.com
* डॉ. लता जैन – वर्तमान समय में ''रोजगार युक्त संगीत कला'' उच्चशिक्षा में एक महत्वपूर्ण आयाम

पत्रिका –

* ''संगीत कला विहार''
* www.granthaalayah.com
* www.joinindiannavy.gov.in

संगीत में उच्च शिक्षा की गुणवत्ता का विश्लेषण

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नास्ति नादात्परो मंत्रः न देवः स्वात्मनः परः।

नानुसंधेः परापूज न हि तृप्तेः परं सुखम्।।

अर्थात् नाद से बड़ा कोई मंत्र, आत्मा से बड़ा कोई देव, नादानुसंधान से बड़ी कोई पूजा और तृप्ति से बड़ा कोई सुख नहीं है।

सृष्टि के आदि से लेकर प्रलय तक संगीत का अस्तित्व स्वीकार करना ही पड़ता है। जीवन पथ के किसी भी मोड़ पर दृष्टिपात करने से पता चलता है कि जीवन की प्रत्येक अवस्था से किसी न किसी प्रकार संगीत की कड़ी अवश्य जुड़ी रहती है। संगीत संसार की प्राचीनतम विधाओं में से एक है, संचार का प्रमुख अशाब्दिक पहलू है जिसका विज्ञान तथा मनोविज्ञान के साथ अटूट संबंध है किंतु वर्तमान शिक्षण पद्धति में संगीत वर्षों से एक उपेक्षित विषय रहा है।

उच्च शिक्षा में संगीत विषय की स्थिति

शिक्षा का क्षेत्र भी आधुनिकता के अनुसार बदलता जा रहा है। आज शिक्षा का मुख्य उद्देश्य चरित्र निर्माण नहीं अपितु भौतिक प्रगति है। इसलिए कहीं न कहीं नैतिक मूल्यों में भी गिरावट देखने को मिल रही है। संगीत का उच्च शिक्षा क्षेत्र भी इस से अछूता नहीं है। इसके अनेक कारण हैं जैसे विद्यार्थियों की बढ़ती संख्या और एक ही कक्षा में साठ–सत्तर विद्यार्थियों की भर्ती। ऐसा करने से शिक्षक हर विद्यार्थी पर ध्यान नहीं दे पाते और विद्यार्थियों के लिए संगीत सूक्ष्मताओं को समझना कठिन हो जाता है।

कई उच्च शिक्षण संस्थानों में तो जो विद्यार्थी अन्य विषय पढ़ने समझने में असमर्थ होते हैं, उन्हें संगीत संकाय में भेज दिया जाता है। ऐसे विद्यार्थियों जिन्हें न संगीत में रुचि होती है, न ही संगीत का कुछ ज्ञान होता है, उन्हें संगीत सिखाना बहुत कठिनाई भरा काम होता है।

संगीत विषय की एक विडंबना यह भी है कि इसका अर्थ बहुत मोटे स्वरूप में लिया जाता है। यहाँ तक कि शिक्षण संस्थानों के संचालकों, प्रशासकगण आदि को संगीत विषय की सामान्य जानकारी भी नहीं होती। यह भी एक कारण है कि संगीत विषय का उत्थान नहीं हो पाता।

स्वर और लय ये संगीत के दो आधार स्तंभ हैं परन्तु विडंबना यह है कि लय से संबंधित ताल का प्रमुख साधन तबला अभी भी उपेक्षित है। तबला विभाग अधिकांश विश्वविद्यालयों में न होने से छात्र इस विषय से वंचित रह जाते हैं।

शिक्षण संस्थानों में प्रायः संगीत विभाग के कमरे खस्ता हालत में ही पाए जाते हैं। एक सबसे बड़ी तथा सामान्य कमी जो संगीत कक्षों में देखने को मिलती है, वह है उनके आकारों का क्षेत्रफल के आधार पर कम होना। इन कक्षों की सार्थकता एवं वास्तविकता उस समय उभरकर सामने आती है जब इनमें कक्षाओं का प्रवेश होता है। पर्याप्त स्थान न होने के कारण इनका दृश्य किसी कक्षा जैसा नहीं अपितु भीड़ जैसा दृष्टिपात होता है और इस वजह से श्वासावरोध भी उत्पन्न हो जाता है।

संगीत में विशेष रूप से वाद्य संगीत की स्थिति बहुत ही दयनीय है। विभागों में वाद्य प्रायः अपर्याप्त मात्रा में होते हैं जिनकी स्थिति भी अच्छी नहीं होती। यह भी एक कारण है कि वाद्य संगीत की कक्षाओं में विद्यार्थियों का प्रदर्शन कम

ही रहता है। इसके कई वित्तीय कारक होते हैं जिनमें सर्वप्रथम तो संगीत विषय को संचालकगण बहुत ही सस्ता विषय समझते हैं तथा उस पर आर्थिक व्यय को बेवकूफी समझते हैं उनके अनुसार एक बाजा ले लो, एक तबला अथवा ढोलक ले लो और बस हो गया संगीत।

वाद्यों को न मँगाए जाने का एक कारण उन्हें ठीक से रखने की व्यवस्था का न होना भी है। संगीत विभागों में वाद्यों को उचित प्रकार से रखने के लिए न तो उचित स्थान होता है और न ही उचित व्यवस्था। अगर उचित व्यवस्था करना भी चाहें तो भी कमरे इतने छोटे हैं कि इस प्रकार की व्यवस्था करना संभव नहीं है।

संसार में हर वस्तु को रखरखाव की आवश्यकता पड़ती है फिर चाहे वह ईश्वर रचित प्रकृति ही क्यूँ न हो। अनेक प्रयासों के बावजूद भी एक निश्चित समयावधि के पश्चात् वाद्यों की मरम्मत करवाने की आवश्यकता पड़ ही जाती है। किन्तु अधिकारीगण संगीत विषय की इस आवश्यकता को न समझते हुए केवल खर्चे को ही देखते हैं उसके द्वारा हुए कार्यों तथा विद्यार्थियों के विकास को नहीं।

सुझाव

संगीत केवल मनोरंजन का साधन मात्र न हो कर चिकित्सकीय सहयोग भी प्रदान करता है। संगीत विभिन्न प्रकार के वैज्ञानिक मनोरोगों जैसे भ्रम, चिड़चिड़ापन, दुख, अकेलापन, आत्मविश्वास की कमी आदि को दूर कर मन, बुद्धि, भावनाओं कार्यक्षमताओं तथा संपूर्ण व्यक्तित्व को प्रभावित करता है। राष्ट्रीय वं अंतर्राष्ट्रीय स्तर पर सेमीनार अथवा गोष्ठियों के माध्यम से इस संबंध में जानकारी का विस्तार करने का प्रयास करना चाहिए।

आधुनिक युग अनुसंधान का है। अंतरराष्ट्रीय स्तर पर तो संगीत के क्षेत्र में अनेक अनुसंधान हो रहे हैं और अधिकतम लोग इन अनुसंधानों से लाभान्वित भी हो रहे हैं। भारत सरकार को भी संगीत शिक्षण तथा अनुसंधान पर बल देना चाहिए तथा समाज में इसके महत्व के प्रचार प्रसार हेतु विभिन्न कार्यक्रमों को प्रायोजित करना चाहिए।

महाविद्यालयों या विश्वविद्यालयों के संगीत विभाग के पुस्तकालयों में संगीत के उच्च अध्ययन हेतु उचित तथा स्तरीय पुस्तकों का अभाव पाया जाता है। इनकी अनुपलब्ध अवस्था में शोधकर्ताओं को इधर उधर भटकना पड़ता है। इसलिए संगीत विभाग के पुस्तकालयों में संगीत संबंधी पुस्तकों प्राचीन ग्रंथों और मासिक पत्रिकाओं का प्रचुर मात्रा में होना आवश्यक है जिसके लिए सरकार को समय–समय पर संगीत के उच्च शिक्षण संस्थानों को वित्तीय सहायता प्रदान करनी चाहिए।

शिक्षा प्राप्त करते समय यह ज्ञात हो जाए कि आगे क्या करना है, तो धनोपार्जन में थोड़ी आसानी रहती है। ऐसी स्थिति में शास्त्रीय संगीत के क्षेत्र में व्यावसायिक पाठ्यक्रमों का समावेश आवश्यक है और विभिन्न संगीत संबंधी व्यवसायों के अनुसार ही विद्यार्थियों को शिक्षा प्रदान की जानी चाहिए।

निष्कर्ष

निष्कर्षतः यह कह सकते हैं कि संगीत विषय के जीर्णोद्धार की बहुत आवश्यकता है, ऐसी प्रणाली की आवश्यकता हैं जिसमें गुरु शिष्य परंपरा के साथ वैज्ञानिक पद्धति का समावेश हो और विद्यार्थियों को आत्मनिर्भर बनाने में सहायक हो।

सन्दर्भ ग्रंथ सूची

* स्वाति शर्माः संगीत शिक्षा के वर्तमान स्वरूपों का विश्लेषणात्मक अध्ययन, *Asian Journalj of Multidisciplinary Studies*, 5 (3), Mar.2017ण
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संगीत में उच्च शिक्षा संबंधित समस्याएं तथा समाधान

रतिन्द्रजीत कौर

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शिक्षा मानव जीवन का एक महत्वपूर्ण अंग है। यह जन्म से मृत्यु तक निरन्तर चलती रहने वाली मनुष्य की मानसिक वृद्धि तथा विकास की प्रक्रिया है। शिक्षा प्राप्त करने वाला मनुष्य उन्नति की राह पर ऊँचाईयों को छूता हुआ अपने जीवन के लक्ष्य को प्राप्त करने की कोशिश करता है। शिक्षा केवल ज्ञान या जीविका का साधन ही नहीं अपितु सम्पूर्ण जीवन के विकास की प्रणाली है। शिक्षा मनुष्य के जीवन की आधारभूत आवश्यकताओं में प्रमुख है। यह मनुष्य के जीवन की आधारशिला है। व्यक्ति का चरित्र, अनुभव का पूर्ण संगठन, जीवन जीना, खुशहाली इत्यादि सभी शिक्षा पर निर्भर करते हैं। शिक्षा द्वारा मनुष्य सभ्य बनता है।

संगीत को अन्य ललित कलाओं में से प्रमुख स्थान प्राप्त है। इसलिए संगीत की शिक्षा उच्च स्तरीय शिक्षण संस्थानों में प्रदान की जाती है। संगीत को यहाँ तक पहुचाने में तथा संगीत को समाज में प्रतिष्ठित स्थान दिलाने में संगीत विद्वानों के असीम यत्न तथा दिन रात की मेहनत का ही योगदान है कि आज जन साधारण के लिए संगीत सीखना सरल तथा सुलभ हो गया। शिक्षा में संगीत का महत्वपूर्ण स्थान है। संगीत की शिक्षा विद्यालयों तथा महाविद्यालयों में विशेष महत्व अधीन दी जाती है। संगीत की शिक्षा प्राप्त करने वाले विद्यार्थी की चेतना शक्ति केंद्रित रहती है, साथ ही वह स्वरलिपि गाते समय लय ताल का ध्यान भी रखता है। इसी विशेष गुण से उसे प्रत्येक विषय को पढ़ने में रूचि बनी रहती है तथा उसकी कल्पना शक्ति में वृद्धि भी होती है।

20वीं शताब्दी के प्रारम्भ से ही संगीत विद्यालयों की स्थापना होने के साथ साथ संगीत विषय को पूर्व माध्यमिक से लेकर परा–स्नातक में भी सम्मिलित कर लिया गया। महाविद्यालयों तथा विश्वविद्यालयों में अन्य विषयों के साथ साथ संगीत के निर्माण तथा विकास होने के बावजूद आधुनिक समय में संगठित शिक्षण संस्थानों में संगीत शिक्षण के विकास, दशा तथा दिशा हेतु विचार–विर्मश करना अतिआवश्क है। आज हिंदुस्तानी शास्त्रीय संगीत के विकास में तथा इसके उच्च स्थान में जो गिरावट आ रही है उसके क्या कारण हैं तथा इसके क्या समाधान हो सकते है।

संगठित संगीत शिक्षण संस्थाओं की समस्याओं में मुख्य समस्या संगीत के विद्यार्थियों का क्रियात्मक पक्ष तथा सैद्धांतिक पक्ष दोनों में निपुण न हो पाना तथा संगीत के विषय में विद्यार्थियों की दिन प्रतिदिन कम होती जा रही रूचि है। संगीत साधना का विषय है। विद्यार्थी परीक्षा में उत्तीर्ण होने के कारण संगीत का विषय तो ले लेते है परंतु इस विषय में मेहनत करने से हिचकिचाते हैं। कई बार विद्यार्थियों के अन्य विषयों में कम अंक मिलने की वजह से वह संगीत में उच्च शिक्षा के लिए प्रवेश करते हैं। कई बार कुछ विद्यार्थियों में रूची तो होती है परंतु यह रूची यां तो क्रियात्मक पक्ष में होती है यां फिर सैद्धांतिक पक्ष में दिखाई देती है। कई बार विद्यार्थी एक ही विधा गायन यां वादन में रूचि रखते हैं जिससे हिंदुस्तानी शास्त्रीय संगीत के विकास में गिरावट आ रही है। यदि इन सबका निष्कर्ष देखा जाए तो संगीत शिक्षण के लिए संगीत के दोनों पक्षों के लिए भविष्य में अलग अलग शिक्षकों का चुनाव करना पड़ेगा। कई बार छात्रों को पूर्ण रूप से समझ न होने से यां सही मार्गदर्शन न होने के कारण उनके लिए संगीत को समझ पाना कठिन हो जाता है तथा वह अपने पथ से भटक जाते हैं।

इसमें सबसे अधिक दायित्व शिक्षक का होता है। एक शिक्षक कुशल कलाकार होने के साथ साथ कुशल शिक्षक भी होना चाहिए अर्थात शिक्षक कला तथा विधि का ज्ञाता होना चाहिए। शिक्षण विधी का ज्ञाता विद्यार्थियों की ग्रहण करने की समर्था के अनुसार ही उन्हे सिखाता है। संगीत के अतिरिक्त उसे अन्य विषयों जैसे इतिहास, दर्शन शास्त्र, मनोविज्ञान, सामाजिक पक्ष आदि की जानकारी भी होनी अत्यंत आवश्यक है। यह ज्ञान पढ़ाए जाने वाले विषय में

तालमेल बनाए रखता है तथा संबंधित विषय की जानकारी देने के लिए विभिन्न पुस्तकों का अध्ययन कर विद्यार्थियों को सत्य का ज्ञान देना चाहिए। शिक्षक संगीत तथा विद्यार्थियों में एक माध्यम के समान होना चाहिए। संगीत शिक्षा में शिक्षक एक मार्गदर्शक के रूप में कार्य करता है जो कि एक कठिन तथा अनिवार्य कार्य है। विद्यार्थियों के सम्पूर्ण विकास का कार्यभार शिक्षक का होता है। शिक्षक जो भी गुण अपने विद्यार्थियों में देखना चाहता है पहले वह गुण उसे अपने अंदर पैदा करने होंगे तभी वह अपने शिष्यों के लिए मिसाल बन सकता है। शिष्यों को प्रतिदिन रियाज करने के लिए, संगीत को सुनने के लिए प्रेरित करना आदि शिक्षक के ही कर्त्तव्य है। एक शिक्षक संगीत के विकास प्रति सचेत होना चाहिए। संगीत के क्षेत्र में नित्य प्रतिदिन नए नए अविष्कार, चुनौतियां, प्रयोग, परिवर्तन आदि होते रहते हैं। उसके बारे में शिक्षक का जागरूक होना तथा विद्यार्थियों को इन सब के बारे में बताना अनिवार्य है। आज कल श्रव्य–दृश्य साधनों द्वारा शास्त्रीय संगीत, लोक संगीत से लेकर संगीत की प्रत्येक विधा का अत्याधिक प्रचार प्रसार हो रहा है। संगीत का स्थान उत्तम रखने के लिए अच्छे बुरे का अंतर समझना विद्यार्थियों को सत्य से जागरूक कराने की आवश्यकता है। कला को पूर्ण रूप से व्यापारिक न होने देना, शास्त्रीय संगीत कलाओं को जीवित तथा प्रफुलित करना, उसकी वृद्धि और विकास अति आवश्यक है।

शिक्षण संगठनों को संगीत का स्थान उच्चतम रखने के लिए सर्वप्रथम शिक्षक की नियुक्ति सावधानी पूर्वक करनी चाहिए। शिक्षक शास्त्रीय तथा क्रियात्मक पक्ष से निपुण होना चाहिए। दोनों पक्षों में निपुण शिक्षक ही विद्यार्थियों को सही शिक्षा दे सकता है। विद्यार्थियों को उत्साहित करने के लिए प्रभावशाली गायक वादक कलाकारों के साक्षात्कार तथा गायन क्रार्यक्रमों की व्यवस्था की जानी चाहिए। इससे उन्हें संगीत में आगे बढ़ने की प्रेरणा मिलेगी। संगीत के विद्यार्थियों के लिए समय पर परामर्श सेवाएं उपलब्ध करवानी चाहिए जिससे उनका मार्गदर्शन होता रहे और वह अपने जीवन पथ पर अग्रसर होते रहें। सरकार को भी हिन्दोस्तानी शास्त्रीय संगीत जो कि हमारी संस्कृति की धरोहर है, इसके महत्व को समझते हुए इसको सम्भाल के रखने और उसके विकास के लिए कदम उठाने चाहिए। समय समय पर शास्त्रीय संगीत समारोह आयोजित करवाने चाहिए। जो विद्यार्थी संगीत में मेहनत करते हैं उन्हें छात्रवृतियां प्रदान की जानी चाहिए जिससे वह उत्साहित रहते है तथा आगे की संगीत शिक्षा में भी अपने नए लक्ष्य निर्धारित करते हैं।

उपरोक्त समस्याओं तथा सुझावों के पूर्ण विचारों पर तेज़ी से कार्य किया जाए अथवा सरकार तथा संस्थाओं द्वारा सशक्त प्रयास किए जाने चाहिए जिससे संगीत की शिक्षण प्रणाली अथवा उच्च शिक्षा के विकास, प्रचार, एवं प्रसार में वृद्धि हो सके। छात्रों को उनकी रूचि एवं योग्यता के अनुसार ही विषय का चयन करना चाहिए। जिससे उनका मार्ग तथा लक्ष्य एक ही रहे। इन सुझावों द्वारा भी संगीत शिक्षण प्रणाली में सुधार हो सकते हैं। अतः कहा जा सकता है वह दिन दूर नहीं जब संगीत कला का वही रूप तथा भविष्य होगा जो सोच कर, निश्चय कर संगीत विद्यालयों, महाविद्यालयों तथा विश्वविद्यलयों में संगीत की उच्च शिक्षा शुरू की गई थी।

संदर्भ ग्रंथ सूची

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ABSTRACTS

Emerging Technologies in Higher Education

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ABSTRACT

Emerging technologies in education has revolutionized the mode of interaction between students and teachers. Rising tuition expenses, costly textbooks, disengaged learning and pressures for educational reform has put numerous challenges on colleges and universities today. Educationists are concerned that students are disengaged from the learning process and our traditional lecture-based teaching do not encourage student immersion, interaction, or critical thinking. Stakeholders in higher education are eyeing for the initiatives which give impetus for quality education. A recent survey indicates that new graduates feel unprepared for the "real world' and ill-equipped with the skills required to be competitive in today's job market. Innovative technology has the potential to assuage these challenges faced by higher education systems. These educational technologies make learning more efficient, engaging, relevant, and entertaining with possibilities to attract more students for enrollment in higher education institutes. The most absorbing and fascinating technologies for institutions of higher learning are those that are perceived to be the most innovative and paint an exciting picture of the future of education.

A brief overview of some emerging technologies that hold promise to enrich and revitalize today's higher education system and better prepare students for the 21st century includes technologies such as: Computerized Grading; Simulation Technology; Gamification; Flipped Classrooms; Massive Open Online Courses; Collaborative Distance Learning Environments.

Key Words: *Emerging Technology, Higher Education, Computerized grading, Gamification, Massive Open Online Courses, Simulation Technology*

A Study of Emotional Intelligence in Relation with Job Satisfaction and Work Motivation among Female School Teachers in Karnal, Haryana

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ABSTRACT

The present study entitled "A study of emotional intelligence in relation with job satisfaction and work motivation among female school teachers in Karnal, Haryana' was undertaken to assess the level of emotional intelligence, and to examine the contribution of job satisfaction and work motivation on emotional intelligence levels of female school teachers. The Emotional Intelligence Scale, The Job Satisfaction Scale and The Work Motivation Questionnaire (WMQ) were administered on 200 female teachers (29-58 years of age), working in government and private schools belonging to Karnal, Haryana. The results revealed that major proportion of the female school teachers remarked significantly high levels of emotional intelligence. Female government school teachers significantly perceived higher levels of emotional intelligence, job satisfaction and work motivation as compared to female private school teachers. Correlation analysis reported that job satisfaction and work motivation were significantly positively correlated with emotional intelligence. The differences in job satisfaction and work motivation of the most emotionally intelligent group revealed significant differences as compared to least emotionally intelligent group. It means that the most emotionally intelligent school teachers who perceived significantly higher levels of job satisfaction and work motivation were better in procuring emotional stability.

Keywords: Emotional intelligence, Job satisfaction, Work motivation

Women Empowerment through Higher Education in Home Science

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ABSTRACT

Education for women's development should include education, self-reliance, personal development, social development, productive capacity, social integration and political understanding. Home Science education is the perfect means for achieving the above given requirements and although it [Home Science] is a systematized and a scientific body of knowledge which helps the individuals to improve their personality for a better and fulfilling life yet the social stigma of being related to household work only has deteriorated its image and de-popularized the subject. With five major areas (human development, family and community resource management, food and nutrition, textile science and extension education) in Home science with various educational and vocational prospects which is a recently developed branch of science it has achieved tremendous development through years. It helps everyone to lead a happy and satisfying personal and social life and also to develop qualities of good citizenship. The imbalance between the roles of man and woman can be avoided and this education has proved that women along with being home maker, she can be a teacher, researcher, entrepreneur and administrator. Thus, it utilizes and proves the woman's potentials in every field of life.

Efforts have been made to change the perception of the stakeholders, yet the goal seems to be distant. Home Science education provides complete and equal access to and control over factors contributing such empowerment, particularly, health, education, information, life-long learning for self-development, vocational skills, employment and income earning opportunities, technical services, inheritance and matrimony, common resources, credit, technology, market, mass-media, family planning, women rights etc.

Therefore there is need to explore into the causative factors responsible for obstructing the subject's growth and the reforms that would help in uplifting the subject. Only problems we have that the different students have their different native languages, different learning rates, grasping powers, different age groups etc which has to be taught with modern pedagogy. What they [Universities and Institutes of higher learning] do, and what is expected of them, must be seen as a service to society; their research must anticipate social needs; and the products of their research must be shared effectively with society through appropriate knowledge-transfer mechanisms.

Keywords: *Women empowerment, Vocational prospects*

Study of Aspiration for Higher Education among Boys

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ABSTRACT

Higher education, also called post-secondary education occurs after completion of secondary education. It enables individuals to expand high order knowledge, skills, thoughts and expression of speech and writing skills and increase understanding of the world and community. Higher education is famous to acquire degrees and diplomas to take up career, Govt. and non govt. Institutions play significant role in supporting teaching and research along with employability. Human capital is formed through education, training and research. Sahil viewed Indian higher education system is third largest in the world after China and UK. The role of Indian higher educational institutes such as colleges and universities in the present time is to provide quality based education in the field of education, research etc to empower youth for self sustainability. Flexible education mode of higher education provide an opportunity to participate in the sustainable developmental process of the community. Jayaram observed that the admission to higher and professional education was based on merit, in actuality it seemed to be determined by a set of non-academic and socio-cultural factors like the caste, economic background, ability to afford, status of parents, medium of instruction at school etc. Thus higher education was available to the higher stratum of society. Sreenivasan examined the foreign influence on higher education in India and foreign assistance works as a network of relation for their economic order and political power. Keeping in view the above the present study was an effort to assess the aspiration for pursuing higher education among boys. Semi structured interview and informal group discussion were conducted with the randomly selected 250 boys of Chandigarh city. It was found that boys choose higher education for both social reasons (85%) and academic purpose (70%). Father and mother both inspired them to join colleges for higher education as it requires in getting good jobs and business. While choosing field of study education knowledge (75%), physical fitness (80%), aptitude (60%) and parents aspiration (79%) etc. were the reasons shared by them. Further it was also concluded from their discussion that higher education is helpful in making career but at the same time it channelize them towards unacceptable forms of social behaviour. To improve the higher education system there is a need to improve teaching pedagogy, build synergies between research and teaching, and facilitate alliance of higher institutions among themselves, research centres and industries. Disadvantage of obtaining a higher education is the delay of entering the real world as well as a lack in real world involvement.

Key words: *Higher education, Human capital, Boys, Aspiration*

Role of Higher Educational Institutions in Nurturing Entrepreneurship

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ABSTRACT

Employment have been a major challenge of the development agenda for decades for any economy, whether it is a developed economy or a developing economy, and for that purpose there is a need of creation of jobs. Educational Institutions plays a major role in achieving this challenging goal by imparting a quality education to the youth. Being in the top hierarchy of education, the role of Higher Education Institutions especially the Management Institutions is not only limited to the task of providing Employment to needy, but also to create opportunities for such people. In a developing nation like India where the World's Largest Youth population reside, it is essential to think about something more than just creating new jobs. As Employment works on demand and supply relationship and the larger Young population will demand for more jobs, there must be an equal supply of Employers also. Entrepreneurs are such people, who not only drive the economy and improve the welfare of their society, but also act as Job Creators or Employers for other youth. Higher Educational Institutes, especially the Management Institutes must therefore are required to focus on Entrepreneurial Education. Entrepreneurship is a way of boosting economic competitiveness and promoting nation's development. Present paper is a writeup on the Role of these Higher Educational Institutions in nurturing Entrepreneurship.

***Keywords:** Higher educayional Institutions, Entrepreneurship*

Women Empowerment through Higher Education

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ABSTRACT

Higher education is an investment where returns are the very substance of what development is all about. Higher education has occupied a special position across the world's communities which recognise it as major vehicle in the processes and missions of sustainable development. This kind is like an asset for individual growth and the development of society as well. India s higher education is the world's third largest in terms of students, coming after China and United States. It enjoys the privilege of having English as the major language of Higher Education. Presently, India has 572 universities, 142 central universities, 129 deemed universities and 115 private use universities. The Indian Institutes of Technology (IITs) have been globally acclaimed for their standard of education and have led the nation to path of greater progress and development. "Woman is the builder and moulder of a nation's destiny. Though delicate and soft s a lily, she has a heart fracture stronger and bolder than a man, she is the supreme inspiration for the man' onward march, an embodiment of love, pity and compassion, she is a doubt, her commanding personality, nevertheless, is given by solemn'- Rabindranath Tagore. Educated women have a greater chance of escaping poverty, leading healthier and more productive lives raising the standard of living for their children, families and communities. Higher education is one of the most important means of empowering women with the knowledge, skills and self-confidence. It brings a reduction in inequalities and helps in improving their status within the family. Higher educational achievements of women can have ripple effects within the family and across generations.

Entire nations, businesses and communities can benefit from the implementation of programs and policies that adapt the notion of women empowerment. Empowerment of women is a necessity, since it enhances both the quality and quantity of human resources available for development. Women empowerment and achieving gender equality is essential for our society to ensure the sustainable development of the country. Sustainable development accepts environmental protection, social and economic development Scholars agree that it plays a huge role in development and is one often significant contributions of development. It is intact a process to make women financially independent educated and progressive enjoying good social status.

Keywords: *Women empowerment, Individual growth, Nations's growth*

Importance of Home Science Education in Motivating Entrepreneurial Skills among Students

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ABSTRACT

Today, unemployment is the most critical problem in our nation. It has become apparent that entrepreneurship play a significant role in the socio-economic development of a society. Economically, entrepreneurship promotes job creation through the formation of new businesses. Home science is an interdisciplinary field of knowledge which focus on Food and Nutrition, Fabric and Apparel Designing, Human development, Resource Management and Communication and Extension. Now, Home Science education is more focused to invigorate the theoretical knowledge of the students through field training and research laboratories so that they are able to launch entrepreneurship programmes successfully. Home Science education helps in creating entrepreneurial skills in different fields of home science like catering, confectionary and bakery parlour, development of preserved and ready to eat foods, diet clinics, health centers, interior designing, hobby centers, boutique, embroidery centers, child care unit, old age homes, rehabilitation centres for children with special needs and many more. In India, various government and non-government organization are conducting Entrepreneurship Development Programmes (EDPs) to cater to the needs of potential entrepreneurs, who may not have adequate educational background and skills.

Keywords: *Home Science, Education, Entrepreneurship*

Higher Education Empowering Women

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ABSTRACT

In current times, our concern is why and how does 'Higher Education' is necessary to talk about? The question is pertinent as well as one of the mobilising factor in providing socioeconomic mobility in men and women. However, the impact of higher education cannot be seen in an absolute sense but in relative sense. Relative as the number of obstructions and barriers are there at the level of one's subjective location in society. The poster is a representation of a woman belonging to a community in India where achieving higher education would be a night mare for her if the higher education institutes like JNU were not there. Social institutions and education has an important role in shaping our tertiary socialization that furnishes our ideas and bring change at our personal and psychological level. Discursive practices of knowledge discourse enable one to motivate their juniors, family members and provide mass mobilisation, it enhances equality of thinking and representing oneself, to work on one's self image which is constantly improving in mirror of self-reflexivity. Hence, in this light the poster reflects the positive self image of a woman, a hope and aspiration of better future of not only one being but across generations.

Keywords: *Higher education, Social institutions*

Impact of Social Institutions on Social Capital

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ABSTRACT

Social Capital is an effective functioning of social groups through interpersonal relationships, a shared sense of identity, norms, value, trust, cooperation to improve social outcomes, social empowerment and economic empowerment. It helps in emeliorate social problems with common efforts. These efforts can be done through social institutions. Social institutions basically a informal institutions which consist group of people who share common ideas, values and effort to cater common problem. As study was conducted to assess the impact of social institutions on social capital in Ranchi District. Two villages (1 from Mander Block and 1 from Angara Block) have been selected for the study. 30 institutions (10 Self Help Groups, 10 Community Resource Persons and 10 Farmers Production Organisations) have been taken for the study. Self made questionnaire was used to assess impact of social institutions onsocial capital. Paired t-test used for pre and post data analysis. A positive impact of social institutions on social capital has been measure.