ABOUT THE BOOK

Higher Education for sustainable development and economic livelihood is the main objective of any higher education. These objectives have been furnished by NEP 2020 which opened a gateway for the students to have new dreams and opportunities. Experiential learning, integrated and joyful learning, holistic development and technology integrated learning provide a scenario for innovations in teaching and learning. This new wave of educational transformations has been created a flexible learning environment and education as more democratic sense. By availing quality higher education an individual to develop qualities and competencies which enable them to meet the global needs. This book provides an opportunity to identify the perspectives in higher education, knowledge creation and innovation and is more useful for scholars and students who thrive for new perspectives in higher education.

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Editors

Dr. Ramesh M.
Dr. Maria Josephine Arokia Marie. S.
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Foreword

An inclusive social and economic development of a country largely depends on a self-reliant and aware younger generation, while self-reliance and awareness are variables of higher education, which paves way in achieving full human potential through enhancing skill and developing expertise, and therefore, offering opportunities to be employable. An affordable education, which is holistic, flexible and multidisciplinary in nature lays a strong foundation for development of an all-round personality. A focused holistic education integrates multiple dimensions of human personality, i.e., physical, mental, intellectual, aesthetic and emotional and help develop a personality capable of living in harmony with nature and culture. Further, quality human capital and physical infrastructure ensure quality education and, in principle, critical thinking, analytical reasoning, creativity, innovation, etc., should constitute integral parts of teaching-learning processes of higher education.

Off late, because of NEP-2020, which aims at restructuring the educational system and providing universal access to quality higher education to all sections in India, particularly to disadvantaged and marginalized groups, higher education is undergoing an oceanic transformation trying to critically increase both learning process and how to learn ability of the children. Itemphasizes on reviving the Indian Education System (Bharatiya Vidya), which was engaged in the pursuit of knowledge, wisdom and truth being holistic and noncompartmental and focused on skill enhancement. NEP-2020 envisages to bring out the best in a student through recognizing, identifying and fostering his unique capabilities ensuring his respect for diversity and respect for the local context. Encouragingly, what I have been observing, these elements of NEP-2020 have been appropriately reckoned and

promoted in events and programmes being organized in celebrating Azadi ka Amrit Mahotsav. It is also delighting to notice that digitization of education as well as proliferation of virtual learning is occurring faster than expected, which has been possible due to the techno-savvy attitude and approach of the teaching community and acceptance and adaptation by the versatile student community symbolizing arrival of a new era in higher education in India.

However, we need to keep in mind that academic excellence in higher education could be achieved through continuous upgradation of the skill and expertise of the teaching community, who should beprepared to embrace to high quality research, an experimental pedagogy and a multidisciplinary teneted curriculum that is reduced in content but rich in elements of essential learning and critical thinking.

In this context, I am pleased to congratulate Prof. M.T.V. Nagaraju, Dean of Education, Dr. Ramesh M. and Dr. Maria Josephine Arokia Marie.S., Assistant Professors in the Department of Education, Indira Gandhi National Tribal University, Amarkantak for publishing this book entitled "Perspectives in Higher Education", which is an outcome of the proceedings of a National Seminar sponsored by Indian Council of Social Science and Research (ICSSR). I was told that the seminar provided a platform to diverse stakeholders in higher education, i.e., academia, students, general public and others for a collective in-depth deliberation on perspectives in higher education. facilitated the genres of communication, stimulated an exchange and cross-pollination of ideas, and showcased a body of knowledge that promises to fulfill the dreams of millions in attaining higher education. Iappreciate their efforts and optimistic that this book will offer an interesting reading on the perspectives in higher education not only to academia in education but also to policy planners, who are involved in implementing NEP-2020.

> Prof. Shri Prakash Mani Tripathi Vice-Chancellor Indira Gandhi National Tribal University Amarkantak (M.P.)

Preface

New frontiers of knowledge and understanding have been imparted to the students in higher education. It also provides opportunities for the learners to upgrade their knowledge and skills from time to time based on the expectation of the society. All dimensions of education will have lots of efforts like holistic education, open and distance education, life-long education, out of which inclusion of artificial intelligence and most possibly the application of artificial intelligence will entirely change the scenario of education in India. Integrating technology competency is highly need of the hour.

In the era of globalization and digital communication system, NEP 2020 was crafted to satisfy the need of contemporary society for skill based knowledge and ensuring the intensive utilization of human resources. To ensure quality education along with continuous learning process, five pillars namely Access, Equity, Quality, Affordability and Accountability was considered while framing NEP, 2020. Thus, this policy exerted much emphasis on participation based learning activity, equitable and inclusive environment, incorporation of regional languages and cultures and equitable use of digital education. Higher education institution should provide freedom and flexibility of learning to the students by introducing the multidisciplinary, inter-disciplinary, and trans-disciplinary approaches and also advocates vocational skills development amongst students not only to address employability through skill development but also to confront India's future challenges.

To discern and deliberate about Perspectives in higher education, the Department of Education, Indira Gandhi National Tribal University, Amarkantak convened a Two Days ICSSR sponsored National Seminar on "Dreams and

Opportunities in Higher Education" on 13 and 14 February, 2023. The seminar gave the platform to recognize and analyse Dreams and Opportunities in Higher Education under Atmanirbhar Bharat mission and to familiarize the various aspects mentioned in NEP 2020.

The present book is an attempt to document the selected papers presented in the ICSSR sponsored National seminar were critically reviewed and finally included for publication. We hope that this book will invite wider interests from its readers and generate concern and curiosity to carry on further research in this area. It's our immense pleasure to convey gratitude to the chapter contributors namely Nirupma Srivastava & Prof. Anjali Bajpai, Kabya Sambad & Ashish Kumar Samal, Dr. Minaketan Behera, Sameer Ahmad Wani & Dr. Dharmendra Kumar Sarraf, Rachna & Hemant Sharma, Khalid Bashir Hajam & Prof. Shamim Ahmad, Ms. Sumitra Gahan & Prof. Mumtaz Begum, Mr. Rajan Patel & Dr. Rajeshwari Garg, Dr. Sarita Singh & Prof. Gyanendra Kumar Rout, Dr. Varsha Shashi Nath & Ms. Preeti Sahu, Mallicka Banerjee & Dr. Avan Mukherjee, Swarup Adhikary, Sharif Khan, & Dr. Lalit Lalitav Mohakud, Shashank Namdev, Dushyant Kumar Marko, & Dr. Abhishek Kumar Prajapati, सुनील कुमार दूबे, Duraimurugan. E & Dr. T. Sangeetha, Dinesh Kumar Jayswal, Dr. Jayaprakash Narayana G, & Prof. Jitendra Mohan Mishra, अभिषेक वर्मा, Manish Kumar, Jasmeet Kaur, Dr. Budh Singh& Dr. Dharmendra Kumar Sarraf, Dr. M. Sanjoy Singh, Raj Maurya, & Sangam Prajapati, Shivamma Hendegar, Mr. Mukesh Kumar & Dr. Biswajit Behera, जसमीत कौर, डॉ. बुद्धसिंह एवं अभिषेक कुमार प्रजापति, ओम प्रकाश चौरसिया & डॉ. रश्मि जैन & संदीप कुमार for contributing their articles.

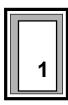
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Opportunities and Challenges of Implementing Artificial Intelligence in Education

-Nirupma Srivastava¹ & Prof. Anjali Bajpai²

ABSTRACT

"By 2030, the majority of humankind in my opinion should have easy access to both health care and education due to digital agents." - Gabor Melli, former senior engineering director at Sony Play Station and Vice President of Machine Learning and Artificial Intelligence at Medable. In modern times, Artificial Intelligence (AI) has gained popularity, which is gradually increasing in the field of education. Due to the rapid developments in cyberspace, the use of artificial intelligence isextremely important because it can alter how we learn very quickly. AI-enabled education system has the potential to become a game-changer. The field of education is still in its infancy stage and over the past few years, it has undergone vast changes. Predominantly as a result of modern technological interventions, there has been a continuous evolution of methods for teaching and learning. Consequently, new technology alters how teachers engage with students, facilitates teaching-learning processes by providing access

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to the right courses, developing innovative learning plans and curricula, changing the design of a regular classroom, enhances universal 24/7 learning access, assisting learners to complete daily chores, and fortifying their weak areas quickly and effectively. Many higher educational institutions in India, have already incorporated AI-enabled teaching-learning processes to benefit their students. The implementation of AI in higher education presents a variety of opportunities and challenges. The opportunities of implementing AI in education improve personalized learning, courses for students, Automation of repetitive tasksincluding administrative labour, learning pattern analysis, paper grading, answering general questions, Improved data analysis, Enhanced accessibility and prompt communication between teachers and students, and more. The challenges faced in adoption of AI may be Biased Data, Lack of teacher training, Security and Privacy, Job displacement, etc. Overall, the study makes recommendations for the implementation of AIbased applications in education system presents many opportunities, it is important to be aware of the challenges that come with it and to take steps to address them.

The opportunities of implementing artificial intelligence are useful in several ways in the sector of education. All dimensions of education will have lots of efforts out of inclusion of artificial intelligence and most possibly the application of artificial intelligence will entirely change the scenario of education in India. The challenges of artificial intelligence are also not to be overlooked; still teachers shall be indispensable from the classroom and from the school but lot of effort that a teacher does can be eased up by application of artificial intelligence and quality teaching learning will be ensured by application of artificial intelligence. Therefore, a cautious effort is needed where opportunities of artificial intelligence may be brought for uses in different ways at the same time efforts may be initiated to overcome the challenges for implementing artificial intelligence in education.

Introduction

Artificial Intelligence is the subfield of computer sciencedeals with the development of intelligent machines that

can carry out tasks that typically need human intelligence. Artificial intelligence-based devices make every effort to mimic human behaviour. Since AI is an interdisciplinary discipline with numerous methodologies, most areas of the technology sector will see a paradigm shift as a result. John McCarthy coined the term "Artificial Intelligence" for the first time in 1956 (Russel & Norvig, 2010).

"The science and engineering of developing intelligent machines, especially intelligent computer programs are known as Artificial Intelligence."

-John McCarthy (1956), Father of Artificial Intelligence

Voice recognition, learning, planning, and problem solving are some of the tasks that artificial intelligence-based systems are intended to perform. The most recent intelligent device is a humanoid robot that can express emotion and alter facial expressions.

Conceptual Evolution of Artificial Intelligence

There are three stages through which Artificial Intelligencecan evolve:

- A. Artificial Narrow Intelligence: These are the most general form of AI which are seen in everyday lives like Alexa, Cortana, and Siri. They assist by responding to queries on request. These are not as strong as it is designed to solve only specific type of task at a given time, therefore, these come in category of Weak AI. Example- Alexa, Cortana, and Siri, Self-driving cars, Alpha-Go, Sophia the humanoid.
- B. Artificial General Intelligence: These are bigger and broader category of AI which has abilities to mimic human intelligence and understanding. These are categorized as Strong AI because they respond all kind of queries and show similar intelligence in a certain specific context. All types of robots come into this category. Example- Nao, world's most popular form of educational robot, has the ability to listen, observe, can do

- conversations, and teach any subject from age group 5 up to university level.
- C. Artificial Superhuman Intelligence: An AI system that is most advanced, intelligent enough and self-aware to supersede the cognitive abilities of humans. Example-First humanoid robot 'ASI' is Alpha 2 which has ability to manage and operate home. Further, it can telland narrate stories and also notifies family members about weather and temperature.

Types of Artificial Intelligence

Based on the functionality of AI-based system, AI can be categorized into the following types:

- 1. Reactive Machines AI: This type of AI includes machines that use the available data only by considering the present context. They can perform a narrowed range of pre-defined tasks. This form of AI recognizes its environment and situation directly, acts accordingly and are unable to draw conclusions from the data to choose the best course of action. It does not have the power to memorize or recall past experiences to affect present decisions. This form of AI is designed only to perform specific tasks and can be easily fooled. Example-Deep Blue, famous IBM's chess program that defeated the world champion Garry Kasparov.
- 2. Limited Memory AI: As name suggests this type of AI machines has limited memory to recall past experiences. These machines can able to take appropriate and improved decisions and plan proper future actions by recalling past experiences from its memory. Example- Self-Driving Carsutilise sensors to detect pedestrians crossing the road, hilly roads, traffic signals, and other situations to improve driving decisions. This aids in avoiding any upcoming accidents.
- **3.** *Theory of Mind AI:* This is more advanced type of AI which play major role in understanding psychology.

It focuses mainly on emotional intelligence to comprehend human thoughts and behaviour in a better way. Example- Recently developed human robot, Sophia, can identify eye and face movement, imitate 62 facial and neck expressions.

4. Self-aware AI: An extension of Theory of Mind AI which seems a little far-fetched. It is the future of machines which will be self-aware, super intelligent, and conscious. It enables machines to become conscious about their internal state and aware of themselves and can predict feelings of others. This type of AI has not been fully developed but continuous and rigorous research is going in this area.

Recently, AI has gained popularity, and India has developed a national strategy for its use in strategic-relevant core sectors. A discussion paper on the national artificial intelligence strategy was posted online on its website June 4, 2018 and identified the five areas of attention. These are Agriculture and Healthcare, Education, Smart Infrastructure and Cities, and Smart Transportation. A country can be transformed by an effective education system through development of human resources and improving production.

Different Ways and Opportunities of Implementing Artificial Intelligence in Education

The adoption of AI is rapidly being popular in a variety of fields including educationall across the world. Technology has long been crucial education, but due to the increased accessibility of smart devices and web-based curricula, its use is now more common than ever. There are numerous ways artificial intelligence is being applied in education to support students in their learning like Scheduling of learning activities (Koedinger et al., 2012), Prediction of student enrollment and dropout rate in schools (Popenici & Kerr, 2017) analyzing learning trajectories of students (Cohen et al., 2017) automated essay scoring are used (Okada et al., 2019; Vij et al., 2020; Yuan et al., 2020). The implementation of AI in education presents

variety of ways and opportunities that are already having an impact on education and will continue to do so.

- (i) Content Creation: AI is used to streamline the creation of courses, which also speeds up the process and reduces costs to design educational programmes. Course development software of AI can help in creating interactive content with ease by incorporating in-app inputs from co-authors and reviewers. By scrutinizing specific needs of students, AI assists in providing a complete picture of the classes and subjects that require revision, so that teachers can modify and design their lesson plan. For instance, an AI research and development company, Content Technologies Inc., CTI, creates customized and personalized educational content with major focus on adaptive learning and interactive intelligent tutoring system.
- (ii) Personalized Learning: A personalized learning strategy is provided to learners by AI based on their own interests and experiences (Luckin et al., 2016). To maximize learning, AI may adapt to proficiency level of learners, their expected outcomes, and pace of learning. Furthermore, AI-driven technologies assist in tracking academic performance of students (Gaudioso et al., 2012; Swiecki et al., 2019), identify areas for improvement, and suggest courses, and recommend courses, opening up by offering numerous possibilities for personalized learning.
- (iii) Enhanced Universal Accessibility: The barriers between schools and conventional grade levels are broken down by AI-enabled universal access. Students from all over the world, including those who communicate in multiple languages or have visual or auditory impairments, can now access courses through AI tools. Students that need to learn at different levels, desire to learn subjects that are not offered at their school, or are away from school can now access real-time subtitles for everything the teacher says using a PowerPoint plugin called Presentation Translator.

- (iv) Instant Feedback system and Improved data analysis: Teachers might not always be aware of the loopholes in their lectures and instructional materials, which can cause students to be confused about specific subjects. AI pinpoints by offering a solution to this problem where course should be improved. Coursera, for instance, is already using this. The technology notifies the teacher when a large number of students submit incorrect answers to their homework assignments and provides upcoming students with personalized messages that offer recommendations for the right response. This particular software makes sure that every student is getting an equivalent conceptual basis and fills in the explanation voids in the courses. Learners gain quick and adaptive feedback (Koedinger et al., 2012), to improve their understanding of subjects rather than waiting for a response from the teacher.
- (v) Automate Manual tasks: Classes and other administrative and organizational duties are common burdens for teachers. They prepare lectures materials and resources manage educational content, grade tests, assess assignments, complete necessary paperwork, create progress reports, and more. This implies that they can become overburdened if they devote too much time on things other than teaching. Teachers can automate manual tasks with the use of automation technologies like automated grading system (Heffernan & Heffernan, 2014), and significantly reducing the level of work teachers have to do when creating knowledge collaboratively (Roll &Wylie, 2016), freeing up more time for them to focus on teaching essential skills.
- (vi) Intelligent Tutoring Programs: Intelligent tutoring services (Heffernan & Heffernan, 2014), such as Alpowered chatbots (Clark, 2020), and tutors, as well as tutoring software, are made to handle individualized feedback and teaching recommendations. But since they are not developed enough to teach in the same

manner that humans can, they cannot take the position of teachers. For courses that can be instructed and evaluated online, they are helpful when teachers are not available. E-learning systems may effectively teach Biology, Mathematics, Geography, Physics, Chemistry, Genetics, and other subjects using AI. They are capable of considering understanding, assessment criteria, and participation. Beyond the classrooms, AI technologies assist students in polishing their talents and strengthening their weak spots.

- (vii) Encouraging Virtual Learning Technologies: Group education programs, student counselling, and holistic learning experiences can all be accomplished in a virtual learning setting. With the support of Virtual Realities (VR) technologies, students can easily access the content on their laptops or smart applications. Children with ADHD/ADD can reduce distractions and lengthen their attention spans by wearing VR headsets. Learners can also use virtual reality-based simulations to train others in soft skills, self-improvement, and life skills.
- (viii) Develop Smart Contents: Digital textbooks, instructional videos and movies, and Augmented Realities (AR) are examples of smart content that may be used to create individualized learning environments for institutions. By identifying the zones where AI solutions may contribute, it will be possible to implement the future global trend of personalization in the education sector. For instance, an institute can create a learning environment based on AR/VR-based lessons to go along with it.

Challenges in Implementing Artificial Intelligence in Education

There are a number of challenges in the adoption of AI in education, which offer directions for the field's advancement (Celik et al., 2022). Taking into consideration the opportunities

Aloffers educators and the challenges they encounter when using AI in the classroom may be crucial for encouraging educators to utilise AI(Holmes et al., 2019). These AI systems assist in addressing the challenges like poor learning outcomes, least adoption of educational technology, and minimal retention rates in schools of rural area and other difficulties in Indian schools.

- I. Biased Data and Limited Reliability on Algorithm: Security is a top priority.AI-enabled technologies may be and subject to hijacking and other privacy concerns, which could endanger records of the students.If AI systems are created using biased algorithms or biased training data, they may propagate bias. For teachers to receive relevant information, AI algorithms must be more accurate (Schwarz et al., 2018).
- II. Minimal Technical Capabilities of AI: There is a chance that AI cannot process some features like visuals or pictures and text (Ma et al., 2020). For the efficient implementation of AI in education, AI software developers lack pedagogical competence and a thorough understanding of learning sciences (Luckin & Cukurova, 2019). Furthermore, according to Cukurova and Luckin (2018) and Luckin & Cukurova (2019), AI application developers overlook the demands placed on them by teachers, who are the primary users of AI in education.
- III. Underdeveloped AI Technical Infrastructure and Lack of Funds: Most institutions and entrepreneurs avoid investing huge monetary amounts because setting up and implementing Al requires a significant amount of money. In educational institutions, there are inadequate technological resources exist for AI-enabled teaching-learning (Ozdemir and Tekin, 2016).
- IV. Inability to be used Various Contexts: It may be difficult to use AI systems in many educational contexts because they are too context-dependent. An AI algorithm, for instance, cannot in different languages

- in a particular learning situation to identify specific (Nikiforos et al., 2020). In other words, cultural differences may be the cause of this constraint.
- V. Ineffectiveness for Evaluation and Assessment: AI is unable to accurately assess the logic and coherence of a text's structure and content (Lu, 2019). AI might not be effective for grading text, images, or numbers. An AI-based system was unable to evaluate when visuals and images were incorporated in complicated texts (Fitzgerald et al., 2015).
- VI. Lack of Technological Expertise: Algorithms and science are the foundation of artificial intelligence. It is possible thatteachers lack the technological expertise about the adoption of AI required for AI-based instruction (Chiu & Chai, 2020). Therefore, it become challenging to comprehend for those who have no technical expertise.
- VII. Dearth inTeacher Training: More knowledge is specifically required to comprehend the benefits and difficulties of teachers using AI.If teachers are not properly instructed on how to use AI-powered technologies, they may be uncomfortable to use effectively. Teachers must be given the necessary information, abilities, and attitudes in order to effectively implement AI-based teaching in classrooms (Häkkinen et al., 2017; Kirschner, 2015; Seufert et al., 2020).
- VIII. Lack of Fascination towards AI in teachers: The use of AI in the classroom may not be seen as exciting or engaging by teachers (McCarthy et al., 2016). Development of skills and AI awareness among preservice teachers may increase the fascination for better implementation and adoption of AI-powered teaching in upcoming future.
 - IX. Delayed feedback: Software dysfunction causes significant problem in providing feedback. It becomes challenging to locate the cause of the software breakdown. It has been observed that AI-based

feedback might be slow and get interrupted. This could result in teachers getting bored with implementing AI (McCarthy et al., 2016).

- X. Restricted AI Adaptive Responses: There is a chance that AI will not offer thorough, adaptable, and customized feedback. While giving students different forms of feedback based on their requirements is very important to reduce workloads of teachers as AI system are not able in doing so (Burstein et al., 2004). As a result, AI systems are now unable to satisfy teachers' needs for formative feedback.
- XI. Unemployment/ Job displacement: The shift in education toward AI-based education does not necessarily mean that there will be a decrease in the demand for teachers (Dillenbourg, 2016). As the advancement of AI quickens, more robots and automation technologies are developed and taking the place of human labour, which has major repercussions for joblessness. For teachers, it is very important to understand the opportunities provided by AI that how it is crucial in modifying their roles in the classrooms will be more rational than speculating on whether AI will replace teachers (Hrastinski et al., 2019).

Conclusion

The application of AI is a very innovative step in teaching learning. For learners and teachers of all levels, artificial intelligence is a highly developed tool that may be utilised to make learning simpler and more accessible. With this new technology, students have the freedom to take control of their education and pursue more individualized learning as per their need. The adoption of AI in education has already proven to be successful in a number of contexts, and it boost academic growth of learners, learning, and teachers' efficacy. AI provides teachers with a number of opportunities for better lesson preparation, implementation, and evaluation by automated essay scoring. For example, AI can identify students'

requirements and make teachers more familiar with them (Celik et al., 2022). *University of the People, California*strongly advocatesflexible, personalized learning, so that students can receive personalized instruction in small classes and earn graduate degree while working at their own speed as their learning strategy is totally centred on distant learning.

In today's world the usability of AI-based education is in its early stages of development, it is also true that for maximum utilization of AI in education efforts at all level are seriously needed. The AI mechanism need to be evolved at all levels along with provisions of skilled and competent human resource. In order to accomplish successful AI implementation in education, teachers in particular and other stakeholders should be involved in the design, development, and integration of AI (Langran et al., 2020; Qin et al., 2020).

As per the challenges discussed in the paper there is need at first to evolve a sound infrastructural for quality provisions of AI so that its utmost benefit may be taken. At the next step an attitudinal change in the mindset of all stakeholder is also primarily needed to address. Lots of fear and apprehensions exist among teachers and other stakeholders which need quick remediation. Such challenges can be easily cope with infusion of AI based training in pre service teacher education program. Today it is undeniable truth that the future of education belong to technological advancements and quality education would largely belong to pool of skilled personal in updated technology. Thus, it is of paramount significance to coalesce proper technological competence specially AI based in teacher training program. Further, along with teachers separate training of other school personnel is also needed to assist teachers in implementing AI in various domains.

In the coming decades major challenge in implementation of AI would definitely be removing regional disparities in implementing AI based education. India and many other developing countries will have to invest heavily in implementing AI, although once such structure is created AI would be a major source of financial saving in the sector of

education.In this way, the usefulness of AI based education is immense in all levels and aspects of education. There is no area in the content or practice of education where AI cannot bring a qualitative reform. Amid such usefulness there is need to assess challenges related to its implementation. A dedicated effort specially at policy level is needed to start this movement. Starting with addressing attitudinal shift there is a need to introduce strong finance-based strategy to realize the vision of AI based education. The utmost participation of all stakeholders would advance application of AI in education and definitely in coming years AI would drastically change scenario of quality education in Indian as well as in global perspective.

REFERENCES

- Burstein, J., Chodorow, M. & Leacock, C. (2004). Automated essay evaluation: The Criterion online writing service. *Ai Magazine*, 25(3), 27-27. https://doi.org/10.1609/aimag.v25i3.1774
- Celik, I., Dindar, M., Muukkonen, H. & Järvelä, S. (2022). The promises and challenges of artificial intelligence for teachers: A systematic review of research. *TechTrends*, 66(4), 616-630.
- Chiu, T. K. & Chai, C. S. (2020). Sustainable curriculum planning for artificial intelligence education: A self-determination theory perspective. *Sustainability*, 12(14), 5568. https://doi.org/10.3390/su12145568
- Clark, D. (2020). *Artificial intelligence for learning: How to use AI to support employee development*. Kogan Page. ISBN 1789660815.
- Cohen, I. L., Liu, X., Hudson, M., Gillis, J., Cavalari, R. N., Romanczyk, R. G. & Gardner, J. M. (2017). Level 2 Screening with the PDD Behavior Inventory: Subgroup Profiles and Implications for Differential Diagnosis. *Canadian Journal of School Psychology*, 32(3-4), 299-315. DOI:10.1177/0829573517721127
- Dillenbourg, P. (2016). The evolution of research on digital education. *International Journal of Artificial Intelligence in Education*, 26(2), 544-560. https://doi.org/10.1007/s40593-016-0106-z
- Fitzgerald, J., Elmore, J., Koons, H., Hiebert, E. H., Bowen, K., Sanford-Moore, E. E., & Stenner, A. J. (2015). Important text

- characteristics for early-grades text complexity. *Journal of Educational Psychology*, 107(1), 4. https://doi.org/10.1037/a0037289
- Gaudioso, E., Montero, M. & Hernandez-Del-Olmo, F. (2012). Supporting teachers in adaptive educational systems through predictive models: A proof of concept. Expert Systems with Applications, 39(1), 621-625. https://doi.org/10.1016/j.eswa.2011.07.052
- Häkkinen, P., Järvelä, S., Mäkitalo-Siegl, K., Ahonen, A., Näykki, P. & Valtonen, T. (2017). Preparing teacher students for 21st century learning practices (PREP 21): A framework for enhancing collaborative problem solving and strategic learning skills. *Teachers and Teaching: Theory and Practice*, 23(1), 25-41. https://doi.org/10.1080/13540602.2016.1203772
- Heffernan, N. T. & Heffernan, C. L. (2014). The Assessments ecosystem: Building a platform that brings scientists and teachers together for minimally invasive research on human learning and teaching. *International Journal of Artificial Intelligence in Education*, 24, 470-497.
- Holmes, W., Bialik, M. & Fadel, C. (2019). *Artificial intelligence in education: Promises and Implications for Teaching and Learning*. Centre for Curriculum Redesign. ISBN-13: 978-1794293700
- Hrastinski, S., Olofsson, A. D., Arkenback, C., Ekström, S., Ericsson, E., Fransson, G. & Utterberg, M. (2019). Critical imaginaries and reflections on artificial intelligence and robots in post digital K-12 education. *Post digital Science and Education*, 1(2), 427-445. https://doi.org/10.1007/s42438-019-00046-x
- Kirschner, P. A. (2015). Do we need teachers as designers of technology-enhanced learning? *Instructional Science*, 43(2), 309-322. https://doi.org/10.1007/s11251-015-9346-9
- Koedinger, K.R., Corbett, A.T. & Perfetti, C. (2012). The Knowledge-Learning-Instruction Framework: Bridging the Science-Practice Chasm to Enhance Robust Student Learning. *Cognitive Science*, 36, 757-798. https://doi.org/10.1111/ j.1551-6709.2012.01245.x
- Langran, E., Searson, M., Knezek, G. & Christensen, R. (2020). AI in Teacher Education. In D. Schmidt-Crawford (Ed.), Proceedings of Society for Information Technology & Teacher Education International Conference (pp. 751-756). Online:

- Association for the Advancement of Computing in Education (AACE). Retrieved from https://www.learntechlib.org/p/215821/
- Lu, X. (2019). An empirical study on the artificial intelligence writing evaluation system in China CET. *Big Data*, 7(2), 121–129. https://doi.org/10.1089/big.2018.0151
- Luckin, R. & Cukurova, M. (2019). Designing educational technologies in the age of AI: A learning sciences-driven approach. *British Journal of Educational Technology*, 50(6), 2824-2838. https://doi.org/10.1111/bjet.12861
- Luckin, R., Holmes, W., Grifths, M.& Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson Education. Retrieved from https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/about-pearson/innovation/Intelligence-Unleashed-summary.pdf
- Ma, Z. H., Hwang, W. Y. & Shih, T. K. (2020). Effects of a peer tutor recommender system (PTRS) with machine learning and automated assessment on vocational high school students' computer application operating skills. *Journal of Computers in Education*, 7(3), 435-462. https://doi.org/10.1007/s40692-020-00162-9
- McCarthy, T., Rosenblum, L. P., Johnson, B. G., Dittel, J. & Kearns, D. M. (2016). An Artificial Intelligence Tutor: A Supplementary Tool for Teaching and Practicing Braille. *Journal of Visual Impairment & Blindness*, 110(5), 309-322. https://doi.org/10.1177/0145482X1611000503
- Nikiforos, S., Tzanavaris, S. & Kermanidis, K. L. (2020). Virtual learning communities (VLCs) rethinking Infuence on behavior modification—bullying detection through machine learning and natural language processing. *Journal of Computers in Education*, 7, 531-551. https://doi.org/10.1007/s40692-020-00166-5
- Okada, A., Whitelock, D., Holmes, W. & Edwards, C. (2019). E-Authentication for online assessment: A mixed-method study. *British Journal of Educational Technology*, 50(2), 861-875.
- Ozdemir, O. & Tekin, A. (2016). Evaluation of the presentation skills of the pre-service teachers via fuzzy logic. *Computers in Human Behaviour*, 61, 288-299. https://doi.org/10.1016/j.chb.2016.03.013

- Popenici, S. A. & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 1-13.
- Qin, F., Li, K. & Yan, J. (2020). Understanding user trust in artificial intelligence-based educational systems: Evidence from China. *British Journal of Educational Technology*, 51(5), 1693–1710. https://doi.org/10.1111/bjet.12994
- Roll, I. & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 26(2), 582-599. https://doi.org/10. 1007/s40593-016-0110-3
- Russel, S. & Norvig, P. (2010). *Artificial Intelligence a modern approach*. Pearson Education.
- Schwarz, B. B., Prusak, N., Swidan, O., Livny, A., Gal, K. & Segal, A. (2018). Orchestrating the emergence of conceptual learning: A case study in a geometry class. *International Journal of Computer-Supported Collaborative Learning*, 13(2), 189-211. https://doi.org/10.1007/s11412-018-9276-z
- Seufert, S., Guggemos, J. & Sailer, M. (2020). Technology-related knowledge, skills, and attitudes of pre-and in-service teachers: The current situation and emerging trends. *Computers in Human Behavior*, 115, 106552. https://doi.org/10.1016/j.chb.2020.106552
- Swiecki, Z., Ruis, A. R., Gautam, D., Rus, V. & Williamson Shafer, D. (2019). Understanding when students are active-inthinking through modeling-in-context. *British Journal of Educational Technology*, 50(5), 2346-2364. https://doi.org/ 10.1111/bjet. 12869
- Vij, S., Tayal, D. & Jain, A. (2020). A machine learning approach for automated evaluation of short answers using text similarity based on WordNet graphs. *Wireless Personal Communications*, 111(2), 1271–1282. https://doi.org/10.1007/s11277-019-06913-x
- Yuan, S., He, T., Huang, H., Hou, R. & Wang, M. (2020). Automated Chinese essay scoring based on deep learning. *CMC-Computers Materials & Continua*, 65(1), 817–833. https://doi.org/10.32604/cmc.2020.010471

Disability Friendly Higher Education Under NEP 2020

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ABSTRACT

The Rights of Persons with Disabilities (RPWD) Act of 2016 establishes a system of inclusive education. Students with and without disabilities learn together under this Act, and the education and training system is appropriately designed to meet the educational needs of students with disabilities. Disability inclusion is an important section under the disability Act 2016. To safeguard the rights of people with disabilities and creating inclusive education system, the National Education Policy 2020 was formulated with the provisions of the RPWD Act 2016. There are significant steps mentioned in the policy to make the education system both school and higher education institution disabilities friendly. Hence, the study is based to understand the level of support provided by NEP 2020 for the higher education students with disabilities (SwDs). The study is divided in 3 parts where the first part of the study is aiming towards

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understanding the duties and responsibilities of a Higher Education Institution for the students with disabilities (SwDs) mentioned by NEP 2020. The second part of the study is looking forward to the provision and support system made by NEP 2020 for the SwDs at higher education institutes by addressing challenges. The third part is visualizing RPWD Act 2016 and NEP 1986 on the context of NEP 2020 to know the progressive changes taken place.

Keywords: Student with Disabilities – SwDs, Persons with Disabilities – PwDs, NEP 2020, RPWD Act 2016,

Introduction

In the recent year, The Indian government introduced the National Education Policy (NEP) 2020. The policy aims to adapt India's educational and training structure to the demands of the twenty-first century. The policy is intended to improve the poor literacy and primary school numeracy results, secondary and middle school dropout, and implement an holistic approach in higher education. Furthermore, the framework recognizes curriculum, early childhood care, and methodology change, revisions of exams and assessments, and investment of the funds in the teacher preparation and evaluation. The success of the policy 2020, with the goal of transforming India's educational structure on all levels, relies on the initiative and methods used to carry it out.

By talking about educational reform, it refers to the inclusive education system aiming towards involvement of all vulnerable sections including the persons with disabilities. Throughout the NEP is clearly pointed out the supportive policy at primary and secondary education which is highly noticeable by researchers. Similarly, the guideline provided by NEP 2020 in the Higher Education system to support persons with disabilities should need to be clearly visible.

To achieve the Sustainable Development Goal (Goal -4-Quality Education), It is essential to investigate the 2020 National Education Policyto support the disability section prioritized at Higher Education.

Objectives

- To idealizing an institute as per NEP 2020 for PwDs at Higher Education Institutions
- To check it out the provisions for PwDs in higher education institutes under NEP 2020
- To understand inclusive educational structure at higher education institution as per NEP 2020
- To visualize RPWD Act 2016 in the context of NEP 2020

Methodology

The report was conducted through the study of secondary data i.e., the NEP 2020 (Government of India) & RPWD Act 2016 (Government of India).

Study Analysis

The New Education Policy proposal focuses on all the major areas of education, including Pre-School Education, Higher Education, and various important educational areas such as online education, teachers training etc. It also discusses the implementation of NEP and creation of new bodies to control the structure. Overall, the policy is going to be a masterpiece for India.

NEP 2020 address the following issues that the current educational system is facing:

- Quality in education
- · Affordability in educational need
- Equality in Access
- Accountability of the institutions

The above address issues are equally connected to the SwDs as well as able bodied students. Hence the NEP 2020 is providing a disabilities friendly atmosphere at each level. The National Education Policy in its report addressed Persons with Disabilities (PwDs) as Divyang. The education policy also justified various areas under which the rights of the persons with disabilities were addressed. It sets 2 areas that make the disability friendly higher educational system. Such as

- Guideline for Higher educational institutes as per NEP 2020
- Provisions for PwDs in Higher Education

Guideline for Higher Educational Institute as per NEP 2020

The Education Policy 2020 stated in the introduction that under the new education policy, a decent education system must be made available to every child, irrespective of where they reside, with a focus on traditionally disadvantaged, poor, and neglected groups. Education is most effective way of promoting economic and social inclusion, equality, smoothening off. Despite unstoppable barriers, the educational system must provide every student from these groups with a variety of targeted opportunities to enter and succeed.

The purpose of the education structure in India is well defined by the NEP 2020 which is not only addressed for the able-bodied students but also different vulnerable sections including the PwDs. As per the NEP 2020, the goal of educational institutes is to generate exceptional individuals who can think critically and take appropriate action, who are brave and resilient, who have a scientific mind set and a creative imagination, and who uphold high moral standards. In order to build an equal and fair, inclusive, and multi-ethnic society, our Constitution seeks to produce involved, constructive, and contributing general public. It is possible through involvement of every social class individual.

The NEP 2020 idealized a good educational institute for the students including SwDs. The institutions must have a stimulating and safe learning environment, a range of learning opportunities, access to resources that are appropriate for learning, and a sound physical infrastructure. Each of the characteristics makes a quality academic setting. In such settings, all students should feel welcomed and cared for.

The introduction section of the NEP 2020 also pointed out 22 principles of educational institute under which few mentioned points are indirectly supported to the SwD sections

which can be view such as

- Instead of rote memorization and studying for tests, there is a focus on intellectual comprehension. Here a SwDs needs equal support when in the study as well as an able bodied student.
- Both SwDs and able-bodied students should have access to ethical and constitutional ideals in the educational system.
- Life skills education for able-bodied students should be available for students with disabilities.
- Widespread use of technology in instruction and learning, the elimination of linguistic barriers, expanding accessibility for students with disabilities, and educational planning and administration should be addressed.
- Ensure that all children, including those with disabilities, can succeed in the educational system, full justice and participation must serve as the hallmarks of all academic expectations.
- Educators and faculties serve as the heart of educational structure through hiring, ongoing staff's development, pleasant workplace condition, and supportive provision. It implies that educators need to have PwD-specific training.
- The educational system's resource efficiency can be defined by the accessibility of study materials like braille books, tactile books, audio books, etc. as well as supporting infrastructure.
- Access to a high-grades of education must be seen as a basic right of every child because education is a public good. A disabled student has the same entitlement to accessible educational help as other students.

Provisions for PwDs in Higher Education as per NEP 2020

On the page no 25 of the NEP 2020, under the subheading 'Equitable and Inclusive Education: Learning for All', at point

no 6.2.5 - mentioned about the policy which acknowledges the significance of developing support systems and opportunity in the high-quality education for any other child should be provided to the Divyang, also known as Student with Special Needs / Disabilities.

The Page no 26, point no 6.10 - states to ensure the integration and equal participation of children with disabilities. Additional support, on the page no 28, point no - 6.12 - ensure that all students with learning disabilities have equal access to and opportunities. PARAKH, the National Assessment Centre, will establish standards and suggest proper tools for conducting assessments from the fundamental stage to higher education (including for entrance exams) for students with learning disabilities. The teachers will help in identification of learning disabilities and plan for special curriculum setup with respect to gender sensitization.

The NEP 2020 justifies nine policy visions in the section of "Part-II- Higher Education" where it mentions the assessment and student support system, increased access, equity, and inclusive measures, a scholarship programme by private universities for underprivileged and disadvantaged students, all infrastructure - educational resources that are accessible to people with disabilities. The vision of the policy also supportive to PwDs. The point no. 12.3 mentions equal participation of students in the institutional activities which is also meant for also SwDs.

The policy states in point 13.2 that the Higher Educational Institute would be provided with basic infrastructure and facilities such as safe drinking water, working toilet facilities, whiteboard, offices, teaching equipment, libraries, laboratories, and enjoyable classroom spaces and campuses. Every classroom must have access to cutting-edge educational technology to improve learning experiences. As the policy is inclusive in nature, hence the availability of all the support systems inside the institutes for SwDs is mandatory.

For the successful implementation of NEP, the higher education institutes will take 13 steps (point no. 14.4.2) under which 2 steps is more suitable for SwDs such as -

- Create support courses for students from underprivileged education level.
- Strictly enforce all anti-harassment and no-discrimination rules

Every institute including libraries should be disability friendly. The NEP 2020 pointed out this in the point number 21.9. This Policy suggests that all communities and academic institutions, including schools, colleges, universities, and libraries, be enhanced and updated in order to provide an adequate supply of books that meet the requirements and preferences of all students, including SwDs.

Glance of RPWD Act 2016 under NEP 2020

- The inclusive education system is promoted through the NEP 2020. 'The Inclusive education', as defined by the RPWD Act of 2016, is an educational system in which students with and without disabilities learn together, with the teaching learning process appropriately revised to meet the needs of different categories of students with disabilities.
- The Disabilities Act 2016 specified the Government and local administrations should take action to encourage, safeguard, and ensure that people with disabilities participate in adult education and continuing education programmes on an equal footing with everyone else.
- The RPWD Act of 2016 listed eight responsibilities for educational institutions that support the establishment of disability-friendly educational institutions. Indirect references to the topics can be found in the policies themselves.
- The Act made clear how colleges should conduct exams considering the needs of SwDs, including giving them more time and scribes.
- Higher education institutions must reserve at least 5% of seats for students with disabilities, with a 5-year age relaxation for the benchmark disability students.

- According to the Act, higher education institutions must provide human resources for people with disabilities and include a component on disabilities in every education courses, commencing in schools, colleges, and universities.
- All universities must encourage the study of disabilities, especially through the creation of study centres.
- The Act also stresses raising awareness on disability, rights and different aspects and challenges of PwDs in higher education and professional training levels.

Finding Gaps

- The Open Distance Learning system for the PwDs section is not visible in the document. Most of the SwDs are unable to visit institutions due to various social as well as institutional challenge. Hence a clear visual guidance for ODL may create a huge support.
- To promote higher education system more disability friendly, a separate educational plan of action needs to be developed to create inclusive education system.
- Financial status for students with disabilities as point no 12.10 needs to be clearly mentioned.
- Training on disabilities education for the teachers training program under NEP 2020 at Higher Educational Institutes is missing in point no.15.8.
- The criteria and other details of vocational education for SwDs should be mentioned clearly.
- Disability friendly online education system needs to be developed to provide home study facilities.
- Need a specific curriculum of Life Skills Education for SwDs.

Conclusion

The Rights for Persons with Disabilities Act of 2016 supports the National Education Policy 2020, that is a masterwork of Indian educational reform. For higher education institutions, a lot of provisions are made to make them disability friendly. In short, the NEP 2020 identifies the following as the minimum requirements for higher education institutions: higher education opportunities and scholarships; more inclusive, accessible, and disability-friendly admissions processes; facilities for social, emotional, and academic support; and strict enforcement of all anti-discrimination and anti-harassment rules. The policy is a powerful legal tool for the PwDs to obtain high-quality education since it is based on the notion that disability is a fundamental component of human diversity. Side by side it makes the educational structure inclusive in nature.

REFERENCES

Government of India (2016). *Rights of Persons with Disabilities Act,* 2016. New Delhi: Rehabilitation Council of India

Ministry of Education (2021). National Education policy 2020. Government of India. Retrieved from https://www.education.gov.in/national-education-policy-2020-1

Status of Higher Education Among Schedule Caste and Schedule Tribe in India: Policies, Programmes and Initiatives

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ABSTRACT

Education is crucial for crossing the socio-economic ladder as higher education provides opportunities to acquire skills and knowledge, which broadens the scope and opportunities to access resources and equal space in society. The objective of the paper is to assess the educational status and trends of Scheduled Caste (SCs)/Scheduled Tribes (STs) in higher education, the major challenges faced accessing higher education and the Government Initiative for Development of Higher Education for SC/ST. A majority of SC/ST have enrolled in undergraduate courses, beyond which the enrollment of SC/ST is unsatisfactory. Arts steam is the most preferred course among SC/ST, and many of them are enrolled in-state public universities. The presence of SC/ST students and teachers in central universities is lesser than allocated, impacting the quality of education

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imparted to students. Improving the state of higher education for SC/ST is essential. Their representation in higher education is most urgent for speedy socio-economic development and inclusive and equitable society.

Key Words: Higher Education, Scheduled Castes, Scheduled Tribe, Access, Enrollment

JEL Classification: I23, I24, I240, I280

Introduction

Education is considered as one of the major weapons for crossing the socio-economic ladder of any community or social group and achieving mobility, development, and empowerment in all fields of human life. The Goal 4 of Sustainable Development Goal - states "Education for all" i.e.to ensure equitable, inclusive and quality education along with the promotion of lifelong learning opportunities for all by 2030. Historically, scheduled castes and tribes are the most vulnerable social groups in India. They have a long history of exploitation, subjugation, and marginalization, which resulted in their socioeconomic backwardness (Singh, 2021). The common problems suffered by both these groups are low levels of literacy, poverty, poor health status, declining sex ratio, high rate of unemployment, violence and atrocities etc. More inclusivity leads to maintaining equity which can help improve the enrollment rate of SC and ST in higher education, taking different initiatives like reservation of seats, scholarships, relaxed admission criteria etc. (Narwana & Gill, 2020). The Constitution of Independent India provided numerous rights and protection and made legal provisions to safeguard and develop scheduled castes and scheduled tribes in the country.

Since Independence, the Government of India has brought several welfare schemes and programs for the socio-economic empowerment of these communities to improve their lives as per the communities in the mainstream. There is inequality in the access and growth of higher education in India. The enrollment of the weaker sections like SC, ST, women and PwD are very low (Vinod & Kumar, 2021).SC/ST, OBCs and Muslims

are largely underrepresented in universities and colleges in India (Hasan & Mehta, 2006; Singh, 2007). Discrimination in caste decreases the participation rate of SC and ST in higher education (Narwana & Gill, 2020). The marginalized students are facing caste discrimination in national level institutions like IITs (Rukmini, 2019). It is accused that higher education institutions are not following the norms of reservations (Das, 2021). The reservation policy applies only to state-funded institutions and to a certain extent, to private institutions (Rukmini, 2019). However, ST students do not fulfil the reservation quota assigned to them (Das, 2021). High expenses in higher education are not affordable for them, resulting in their exclusion from higher education. SC students in higher education have increased over the decades, but the representation of SC/ST students remains proportionately lower than the students belonging to the general categories (Dhende, 2017). The Census 2011, shows that the literacy rate of scheduled castes and the scheduled tribe was 66.7 % and 58.96 %, respectively, but it is 72.99 % at the national level. The census data shows that there is a steady growth of literacy among these groups, but it is lower than the other all India rate of literacy. Further, among SC and ST, female literacy is worse than male. However, both SC literacy and SC female literacy are somehow in a better position when compared to the overall literacy rate of the ST and ST female populations. This shows a huge gender disparity in education among both categories.

This paper assesses the educational status of SC/ST in higher education by using recent government data and critically examines the trend of SC/ST in higher education. The major challenges faced to access higher education and their representation is also discussed.

Data and Methods

The paper is based on secondary sources i.e., books, journals, media reports, and working papers. Data used for analysis were collected from different reports of the All India Survey on Higher Education, Census of India, and different

committee reports. The finding is drawn from the data extracted and analyzed by using descriptive statistics like percentage, average, growth rates etc.

Enrollment in Higher Education

The all India total enrolment in higher education of all categories population in 2011-12 was 29184331, and out of them, the enrollment of SC and ST was 12.23% and 4.48%, respectively. However, total enrollment in higher education in all India levels has increased to 14.68% and 5.59% in the case of SC and ST in 2019-20, respectively. The data suggest that, in the last 9 years from 2011-2020, the overall enrolment of SCs in higher education has steadily increased. Also, the overall enrolment of STs also steadily increased except 2012-13. Enrollment is less than 1% growth per year which poses a serious challenge for the higher education of these communities. Female enrollment among SC and ST has steadily increased in the last few years. The female enrollment is a little lower than males. Table 1 shows

Table 1: Trends in SC/ST Enrollment in Higher Education (in %)

Years		SC			ST	
	Mal e	Fem al e	Both	Male	Female	Both
2011-12	1981164	1590910	3572074	728074	582187	1310261
	(55.46)	(44.54)	(12.23)	(55.57)	(44.43)	(4.48)
2012-13	21 19261	1728681	3847942	732065	588296	1320361
	(55.08)	(44.92)	(12.76)	(55.44)	(44.56)	(4.37)
2013-14	2290173	1948034	4238207	808804	677708	1486512
	(54.04)	(45.96)	(13.10)	(54.41)	(45.59)	(4.59)
2014-15	2504463	2102203	4606666	893511	747298	1640809
	(54.37)	(45.63)	(13.46)	(54.46)	(45.54)	(4.79)
2015-16	2606117	2204197	4810314	916917	787544	1704461
	(54.18)	(45.82)	(13.90)	(53.80)	(46.20)	(4.92)
2016-17	2731689	2359826	5091515	983778	868597	1852375
	(53.65)	(46.35)	(14.25)	(53.11)	(46.89)	(5.18)
2017-18	2774933	2505428	5280361	1001989	911875	1913864
	(52.55)	(47.45)	(14.41)	(52.35)	(47.65)	(5.22)
2018-19	2835663	2731415	5567078	1052121	1015627	2067748
	(50.94)	(49.06)	(14.88)	(50.88)	(49.12)	(5.52)
2019-20	2854313	2803359	5657672	1072646	1083463	2156109
	(50.45)	(49.55)	(14.68)	(49.75)	(50.25)	(5.59)
CAGR	4.14	6.50	5.24	4.40	7.15	5.69

Source: Annual Reports of All India Survey on Higher Education

an increasing trend in enrollment in higher education. The total number of enrollment among SCs increased from 35.72 lakh in 2011-12 to 56.58 lakh in 2019-20 at the compound annual growth rate (CAGR) of 5.24%. In the case of STs, the CAGR value is 5.69%. Among all these states and union territories, Uttar Pradesh (20.84%) has the highest enrollment of SCs in higher education followed by Tamil Nadu (10.85%), Maharashtra (8.90%) and the lowest enrollment was recorded in Andaman and Nicobar Islands i.e. only 53 students followed by Dadra and Nagar Haveli(205 students) and Mizoram with 222 candidates.

In the case of STs, Rajasthan (11.78%) is at the top followed by Madhya Pradesh (9.99%) and Maharashtra (8.75%). The lowest SC enrollment in higher education was in Lakshadweep (0.015%) followed by Daman and Diu (0.018%) and Andaman and Nicobar Islands (0.02%).

Gross Enrolment Ratio

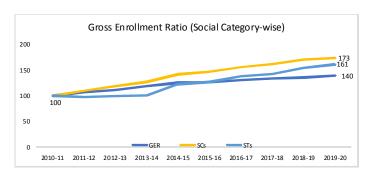
The Gross Enrollment Ratio (GER) of SC (23.4%) and ST (18%) are comparatively lower than the GER of all categories population (27.1%) having a significant difference in 2019-20. Further, the GER of STs is much worse than the GER of SCs. The male ratio is slightly higher than the female ratio in all social categories, but there is no significant difference among them. Further, the GER of scheduled castes and scheduled tribe

Table No 2: Gross Enrollment Ratio Among Social Categories

	All Categories			SCs			STs		
Years	Male	Fe mal e	Total	Male	Female	Tota1	Male	Female	Total
2011-12	21.1	19.4	20.8	15.8	13.19	14.9	12.4	9.7	11
2012-13	22.7	20.1	21.5	16.9	15	16	12.4	9.8	11.1
2013-14	23.9	22	23	17 <i>.</i> 7	16.4	17.1	12.5	10.2	11.3
2014-15	25.3	23.2	243	20	18.2	19.1	15.2	12.3	13.7
2015-16	25.4	23.5	24.5	20.8	19	19.9	15.6	12.9	14.2
2016-17	26	24.5	25.2	21.8	20.2	21.1	16.7	14.2	15.4
2017-18	26.3	25.4	25.8	22.2	21.4	21.8	17	14.9	15.9
2018-19	26.3	26.4	263	22.7	23.3	23	17.9	16.5	17.2
2019-20	26.9	273	27.1	22.8	24.1	23.4	18.2	17.7	18

Source: Annual Reports of All India Survey on Higher Education

females are significantly lower than the GER of all categories of females. However, the GER of both the communities has steadily increased over the subsequent year. Furthermore, the GER of STs is lower than the SCs throughout the years. The highest percentage of GER of Scheduled Caste and Scheduled Tribes was found in 2019-20 (Refer Table-2).



In 2018-19 and 2019-20, it was found that the female GER is higher than males in all categories and SCs but in the case of STs, over the years male GER is higher than that of the female GER. There is a positive sign of female enrollment in higher education. All India GER among SC community is 23.4, across the states and UTs Mizoram (132.3) stands in the first position followed by Meghalaya (91.6) and Manipur (67.3). On the other hand, the states and UTs like Ladakh (0.0), Bihar (11.4), and West Bengal (14.9) are at the bottom of the list. In the case of STs, all India GER is 18.0, and among the states, the best performers are Uttarakhand (45.8), Tamil Nadu (40.7) and Himachal Pradesh (39.5), and the least performers are Lakshadweep (4.8), Dadra, and Nagar Haveli (5.0) and Ladakh (8.5). But overall, the states and UTs like Sikkim (75.8), Chandigarh (52.1), and Tamil Nadu (51.4) are in a better position, while Daman and Diu (6.1), Lakshadweep (7.5), and Ladakh (7.9) are in a worse position.

Gender Parity Index (GPI)

GPI indicates female participation per 100 males. It is interesting to note that female participation in higher education

among all categories 100 female per 100 males in 2018-19 and 101 females per 100 males in 2019-20. It was 105 and 97 per 100 males for SC and ST in 2019-20. The growth of the GPI of ST was stagnant in 2013-14 and 2014-15 whereas SC and all categories were stagnant in 2014-15 and 2015-16. GPI among SCis better than that of all categories population, but in the case of Scheduled Tribes, it is worse.

Table 3: Social Category-wise Gender Parity Index

Year	STs	SCs	All
2010-11	0.74	0.84	0.86
2011-12	0.87	0.88	0.88
2012-13	0.79	0.89	0.89
2013-14	0.81	0.92	0.92
2014-15	0.81	0.91	0.92
2015-16	0.83	0.91	0.92
2016-17	0.85	0.93	0.94
2017-18	0.87	0.96	0.97
2018-19	0.92	1.02	1.00
2019-20	0.97	1.05	1.01

Source: Annual Reports of All India Survey on Higher Education

The states and UTs like Daman and Diu (1.88), Kerala (1.86) and Panjab (1.42) are in the top position and Bihar (0.60), Mizoram (0.67), and Tripura (0.76) are in the bottom position in the SC category. Out of the total 15 states and UTs, the performance of SC (1.05) is better than the index of the country. In the case of STs, the states and UTs like Lakshadweep (3.43), Ladakh (2.43) and Daman and Diu (2.20) are in the top position and Andhra Pradesh (0.76), Bihar (0.77) and Maharashtra (0.78) are in the least position in the list. The GPI of 21 states and UTs are better than the index of India (0.97) in the case of STs. Among out of the total states and UTs the index of 22 is greater than the national index (1.01).

Universities and College Enrollments

Out of the total enrollment in higher education, 11.03% were SCs and 4.87% were from the STs category in 2019-20. Across the institution, the participation of SC students is more in the case of Central universities (13.73). Gender wise distribution

in the case of SC male participation is more than female except Institute under State Legislature Act. In the case of ST, the students' participation is more in the state private open universities, i.e., 22.45% from among different universities/institutions. Between male and female, male enrollment is higher than the female in different institutions and universities except forInstitute under State Legislature Act, Deemed University-Government Aided and state private open university. As a whole, the male enrollment is higher than the female in the case of both SC and ST across the institutions/universities. However, the enrollment of SC and ST students is less than the quota allotted to the respective communities.

Table 4: SC & ST Enrolment in Various Types of Universities (Teaching Departments and Constituent Units/Off-campus Centers) (in %)

		SC		ST			
Types of University	Male	Fe ma le	Tot al	Male	Female	Total	
Central University	50705	48156	98861	16400	16030	32430	
	(51.29)	(48.71)	(13.73)	(50.57)	(49.43)	(4.50)	
Central Open	83467	59951	143418	42456	40996	83452	
University	(58.20)	(41.80)	(12.29)	(50.87)	(49.13)	(7.15)	
Institute of National	27355	7933	35288	12377	3840	16217	
Importance	(77.52)	(22.48)	(12.03)	(76.32)	(23.68)	(5.53)	
State Public University	163327 (51.32)	154952 (48.68)	31 82 79 (12 3 4)	514 <i>6</i> 7 (50.72)	50011 (49.28)	101478 (3.94)	
State Open University	92138 (61.18)	58455 (38.82)	150593 (12.47)	49328 (57.81)	35994 (42.19)	85322 (7.06)	
State Private	63965	32319	96284	32365	23927	56292	
University	(66.43)	(33.57)	(7.54)	(57.49)	(42.51)	(4.41)	
Institute under State	124	393	517	55	101	156	
Legislature Act	(23.98)	(76.02)	(8.54)	(35.26)	(64.74)	(2.58)	
Deem ed University-	2556	1146	3702	1687	912	2599	
Government	(69.04)	(30.96)	(9.32)	(64.91)	(35.09)	(6.54)	
Deem ed University-	2865	3266	6131	646	665	1311	
Government Aided	(46.73)	(53.27)	(10.92)	(49.28)	(50.72)	(2.33)	
Deemed University-	26082	18259	44341	8805	7449	16254	
Private	(58.382)	(41.18)	(5.62)	(54.17)	(45.83)	(2.06)	
State Private Open	N.A.	N.A.	N.A.	470	479	949	
University	IN.A.	IN.A.	N.A.	(49.53)	(50.47)	(22.45)	
Total	51 25 84 (57 .12)	384830 (42.88)	897414 (11.03)	216056 (54.50)	180404 (45.50)	396460 (4.87)	

Source: All India Survey on Higher Education Report, 2019-20

There is no significant difference between SC males and females enrolled in Central University and State public universities. Enrollment of SC female is much lower than male in State Open University, State Private University and Deemed University-Government. Among STs, there is no significant difference among male and female enrollment in Central University, Central Open University, State Public University, Deemed University-Government Aided, State Private Open University. In Central University, Central Open University, and State Public University, female enrollment is slightly lower than males. In Deemed University, male enrollment is a little lower than female.

Table 5: SC & ST Enrollment in Various Types of Universities (Affiliated and Constituent Colleges) (in %)

Types of		SC		ST			
University	Male	Fe mal e	Total	Male	Female	Total	
Central	39101	41 987	81088	91408	99111	190519	
University	(48.22)	(51.78)	(10.28)	(47.98)	(52.02)	(24.14)	
State Public	1949373	2094045	4043418	689894	723802	1413696	
University	(48.21)	(51.79)	(15.34)	(48.80)	(51.20)	(5.36)	
Total	1988474	2136032	4124506	781302	822913	1604215	
	(48.21)	(51.79)	(15.19)	(48.70)	(51.30)	(5.91)	

Source: All India Survey on Higher Education Report, 2019-20

Enrollment of SCs in Central universities is worse than STs. In higher education, the majority of SC/ST have been enrolled in-state public universities. The enrollment of scheduled castes in-state public universities is 98.03%, and it is 88.12% in the case of scheduled tribes. There is a negligible significant difference between male and female enrollment in both SC and ST in both types of universities. The enrollment of females of SC/ST is better than males in both central and state public universities.

Programme Wise Enrollment

In India, about 300 programmes are offered by different higher education institutions across the states. Out of which, some of the important programmes have been listed in Table No. 6. Both SC and ST students prefer to enroll in BA programmes than the other programmes. The percentage of male students is more than females in the Ph.D. programme

both in SCs and STs but in MPhil, the percentage of the female is more than male. Not only M.Phil. but also in M.A., M.Sc., M.Com., B.A., and B.Sc. the percentage of the female is more than the percentage of male. This shows that the percentage of females are in higher education than males. Girls' enrollment in undergraduate courses is increasing while boys in this category are decreasing (Rukmini, 2019). Only in the B.Com. course, the percentage of males is more than females but the difference is negligible. There is a large difference between the percentage of males and females in M.Tech., B.Tech., and MBA programmes both in SC and ST categories. Thus, the participation of marginalized groups in different programmes across the states is increasing.

Table 6: Social Group-wise Distribution of Students across Programmes (in %)

		1 11 1201				
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Programm es	Male	Female	All	Male	Female	A11
	11890	7681	195 <i>7</i> 1	4009	31 40	7149
Ph.D.	(60.75)	(39.25)	(9.83)	(56.08)	(43.92)	(3.59)
	1522	2021	3543	590	636	1226
M.Phil.	(42.96)	(57.04)	(14.81)	(48.12)	(51.88)	(5.12)
	101977	147496	249473	53960	72286	126246
M.A.	(40.88)	(59.12)	(15.57)	(42.74)	(57.26)	(7.88)
	37047	53631	90678	14791	19475	34266
M.Sc.	(40.86)	(59.14)	(11.56)	(43.17)	(56.83)	(4.36)
	19285	29767	49052	7359	9364	16723
M.Com.	(3932)	(60.68)	(10.28)	(44.01)	(55.99)	(3.51)
	834294	922187	1756481	361766	374423	736189
BA.	(47.50)	(52.50)	(18.19)	(49.14)	(50.86)	(7.63)
	322148	339715	661863	11 00 76	115169	225245
BSc.	(48.67)	(51.33)	(14.06)	(48.87)	(51.13)	(4.78)
	245309	242901	488210	77245	67839	145084
B.Com	(50.25)	(49.75)	(11.73)	(53.24)	(46.76)	(3.48)
	10470	5450	15920	3044	1250	4294
M. Tech	(6576)	(34.23)	(11.61)	(70.89)	(29.11)	(3.13)
	156863	62328	21 91 91	51075	17560	68635
B. Tech	(71.56)	(28.44)	(10.21)	(74.42)	(25.58)	(3.20)
	35219	25702	60921	6975	4513	11488
MBA	(57.81)	(42.19)	(9.99)	(60.72)	(39.28)	(1.88)

Source: All India Survey on Higher Education Report, 2019-20

There is an under-representation of marginalized candidates in PhD programmes of different national level institutions like IITs, NITs, IISERs etc. Dropout rates among Scheduled Tribes students from PhD programmes in different

national level institutions is very high (Sahoo, 2021). The dropout rate is higher in the case of marginalized students than the higher class students in IITs (Rukmini, 2019). Both SC and ST are unable to access different higher education programmes as per reservation policy. Dropout rate is higher in the case of marginalized students than the higher class students in IITs (Rukmini, 2019). Only in the case of BA, the SC students access the programmes as per the given reservation. Table 6 shows the marginalized groups are behind the requirement.

Mode Wise Enrolment of SC and ST Students

Students are enrolling their names either in regular mode or distance mode, those who are engaged in different jobs and those who are not getting admission in regular mode, prefer programme in distance mode. More percentage of SC (14.52) are enrolled in regular mode compare to the distance (11.79) mode of the programme, but in the case of ST, the percentage of enrollment is more in distance mode (5.09) than regular mode (3.69). The enrollment of SC and ST males are higher than the femaleenrollment in both the categories without having a significant difference.

Table 7: Social Group-wise Distribution of Students between Modes of Programmes (in %)

Mode of	S	cheduled Cas	ste	Scheduled Tribes			
Programmes	Male	Female	All	Mal e	Fem al e	All	
	2748708	2675964	5424672	6997001	6787528	13784529	
Regular	(50.67)	(49.33)	(14.52)	(50.76)	(49.24)	(3.69)	
	284989	220444	505433	118737	99302	21 80 39	
Distance	(56.39)	(43.61)	(11.79)	(54.46)	(45.54)	(5.09)	

Source: All India Survey on Higher Education Report, 2019-20

Status of Persons with Disability (PwD) and Social Groups The status of PwD shown in Table 8 presents inconsistency i.e. the participation of PwD candidates in higher education is increasing but not continuously. The SC PwD candidates are more (9.4%) than the ST (3.4%). The SC PwD participation was 8.8% in 2010-11, which increased to 9.4% in 2019-20. In the case of ST,it was 2.6% in 2010-11, which increased to 3.4% in 2019-20. From 2010-11 to 2017-18, there was a significant

difference between PwD female enrollment and PwD male in the SC category. A higher percentage of PwD females were enrolled in higher education than males, but in 2012-13 both female and male percentages were the same i.e., 12.8%. After 2017-18, the percentage enrollment of PwD maleswas more than PwD females. But in the ST category, the percentage of PwD male enrollment was more than the PwD female in higher education from 2011-12 to 2016-17 but in 2012-13, the percentage of female PwD (4.4%) was slightly more than the percentage of PwD male (4.3%). After 2016-17, the percentage of female PwD increased more than the percentage of male PwD among the ST community.

Table 8: Social group-wise distribution of PwD Students (in %)

	Schedul ed Caste			Sch edule d Tribe s		
Ye ar	Male	Female	All	Male	Fem al e	All
2010-11	38.6	61.4	8.8	70.03	29.97	2.6
2011-12	6.4	10.2	8.1	2	2.3	2.1
2012-13	12.8	128	128	4.4	4.3	4.4
2013-14	8.6	92	8.8	2.6	2.4	2.5
2014-15	98	10.9	103	2.6	2.1	2.4
2015-16	9.9	11.9	109	2.7	2.3	2.5
2016-17	10.3	12.2	11.1	2.6	2.5	2.5
2017-18	93	9.6	9.4	2.6	3.1	2.9
2018-19	9.5	92	93	2.8	4.2	3.4
2019-20	9.5	93	9.4	2.9	4.3	3.4

Source: Annual Reports of All India Survey on Higher Education

Challenges and Issues in Higher Education

There is inequality in the access and growth of higher education in India. Development is possible only when the Dalit's/marginalized are encouraged to be a part of the streamlined society for inclusive and holistic growth. The enrollment of the weaker section like SC, ST, women and PwD is very low. Instances of high drop rates and snail pace growth in enrolment ratio defer the possibility of inclusive development in the education sector. The cases of dropouts increased with an increase in the level of education. Moreover, a high rate of the dropout was observed in premier Institutions due to castebased discrimination and poor academic performance.

Discrimination takes a toll on an individual's confidence and mental health, which erodes one's spirit to learn and grow. Such discrimination needs to be dealt with severity to ensure that instances are nipped in the bud with a strong message of inclusiveness among all.

The privatization and commercialization of the education system have made educational institutions a money minting machine wherein the current teaching staff is burdened with more workload with hence it impacts the quality of their output. Resultantly, in the long run, the students lose, making them less employable, underconfident, and demotivated. Thus, a limited skill set among the youth is a major obstacle that hinders the growth of students belonging to the SC/ST community. Further, the weak structure of the academic curriculum is unable to prepare the students to be industry-ready or at least make themselves self-employable. Too much rote learning with poor ICT and infrastructure setback their path towards the overall development of a student. The underperformance of students contributes to the under-performance of colleges and universities. It was observed that the representation of the minorities and disadvantaged sections of the society in the teaching and administrative jobs are below their population. The vacancies are carried forward, and the positions of the SC/ST category are also left unfilled, leading to slow learning and teaching in the organisation. In particular, the Teachers representation of SC/ST communities in higher education is another challenge as their representation is very less. Out of all the teachers in higher educational institutions in India, 8.79% and 2.35% are SC and ST teachers, respectively. The data shows that the total percentage of SC and ST teachers in the country is less than the share of their total population. This shows an alarming situation in the context of the representation of teachers belonging to SC and ST communities. However, in both categories, female representation in teaching positions is very less. Besides, a huge gender disparity in the representation of SC/ST teachers in various universities and colleges i.e. public universities have more gender disparity than private universities based on the representation of scheduled castes teachers. Except for state private universities, representation of scheduled tribe female teachers is less than the scheduled tribe male in all other universities and colleges. However, in both state and central public universities, the gender disparity of SCs is worse than STs. Overall, teachers belong to SC and ST, the highest numbers are in state public universities. However, more ST teachers are represented in the central universities thanSC teachers. The situation of SC and ST in higher education in terms of enrollment, pass out and recruitment of teachers is steadily increasing but at a slow rate. This situation demands an urgent intervention of state and development actors to improve the status and condition of higher education among scheduled castes and scheduled tribes.

Government Initiative for Development of Higher Education for SC/ST

The Indian state has made several constitutional and legal provisions for improving the educational status of Scheduled Castes and Scheduled Tribes. The Kothari commission brought by the government of India has emphasized the principle of equalizing the educational opportunities and enabling the backward and underprivileged classes for the country to improve their condition by providing education. The National Policy on Education (1986) which had laid special emphasis on the removal of disparities and equalizing educational opportunities for all. The revised policy of 1992, adopted strategies for increasing enrollment and retention by reducing dropouts of SC/ST in educational institutions. It has emphasized the provision of post-matric scholarship, pre-matric scholarship, construction of hostels, free books, stationary facilities, uniform, mid-day meals, provision of coaching, etc. for the educational advancement of scheduled castes and scheduled tribes. Emphasis was given to openschools in the habitat area of scheduled castes and scheduled tribes in the country. The National Curriculum Framework (2005) was introduced during the 10th plan period to address the disparities of education based on caste, gender, religion, language etc. The National curriculum framework emphasized reducing the disadvantages in education and educational inequalities through policies and schemes and designing appropriate curriculum, pedagogy, and learning task. The major schemes which were implemented for the educational development of scheduled castes and scheduled tribeswere DPEP, Lok Jumbish, Operation Blackboard, Minimum level learning and DPEP, SSA, RMSA, community-based monitoring, the intervention of early childhood care and education, Anganwadi and Balwadi, midday meal schemes, incentives and remedial coaching, vocational education, pre scholarship, etc.

Along with primary education, the Government of India has emphasized improving the educational status of Scheduled Castes and Scheduled Tribes in Higher Education. The various schemes for the improvement of the status of higher education for scheduled castes and scheduled tribes are Post-matric scholarship, Merit-cum-Means Fellowship, National fellowship for SC and ST students, Babu Jagjivan Ram Chhatrawas Yojana, National overseas scholarships, special educational development programmes for SC girls belonging to low literacy areas, up-gradation of merits of SC children, free coaching for SC students, National Scheduled Castes Finance and DevelopmentCorporation (NSFDC). The 'Scheme of Grants in Aid to Voluntary Organizations who are workingfor the educational development of scheduled castes has been adopted by the state to enable and upgrade skills among scheduled castes to generate employment and gainful employment. National Fellowship for SC students was launched in 2005-06 toprovide fellowship for SC students to pursue higher education, M.Phil. and PhD. The government of India initiated central Sector Schemes of National Overseas Scholarship to provide financial assistance to the meritorious SC/ST students to pursue higher education in M.A. and PhD courses in foreign universities.

Reservation in admission and employment is provided in the constitution of India for scheduled castes and scheduled tribes. As a result, seats are reserved for SC/ST students in admission in higher educational institutions. Reservation is provided in the employment of SC and ST in the higher educational institution. Under UGC, the government of India runs various schemes for the development of higher education for scheduled castes and scheduled tribes. These schemes are the provision of reservation for SC and ST students in NET and JRF examination and also free coaching is given by UGC for SC and ST to clear NET-JRF and medical examination. UGC also provides special development grants to the colleges which have relatively the highest numbers of SC and ST students. Post-Doctoral Fellowship for scheduled castes and scheduled tribes. Equal opportunities cell in institution of higher education for the protection of SC/ST students discrimination and other problems.

Ministry of Human Resource Development has made provision for the exemption of fees including material costs for SC and ST and opening of more study and examination centres in SC/ST dominated areas to increase their access to distance education. There are three councils under the Ministry of Human Resource Development, namely the Indian Council of Social Science Research, the Indian Council of Historical Research, and the Indian Council of Philosophical Research. Under these councils, the government of India runs many schemes to improve the educational status of SC and ST in higher education. These institutions provide fellowship for SC/ ST students to pursue higher education and also provide financial assistance to the students and faculty to attend seminars and conferences. Further, these councils provide special funds for organizing research methodology workshops for SC/ST students to improve their research and writing skills. The Government of India has launched a "Free Coaching Scheme" for SC and OBC candidates (funded by the Ministry of Social Justice and Empowerment) to support students preparing for several government exams like UPSC, SSC, RRBs, PSUs, entrance exams for higher education into various Institutes, etc. This scheme aims to help students who are ambitious and focused in their careers but restrained due to financial constraints. Apart from the coaching stipend will also be provided to the students as an allowance for the local and outstation students i.e., Rs. 3000 and Rs. 6000 respectively (Sharma, 2021). Some of the schemes are explained below:

- Post-matric Scholarships for SC /ST students: For students for pursuing studies after class 12, Degree and Post Graduate level courses including M. Phil., Ph.D. and Post-Doctoral research in Medicine (Allopathic, Indian and other recognized systems of medicines), Engineering, Technology, Planning, Architecture, Design, Fashion Technology, Agriculture, Veterinary & Allied Sciences, Management, Business Finance / Administration, Computer Science/Applications.
- ONGC & NTPC scholarship merit scholarship for 1000 meritorious SC/ST students every year who are in their first year of Engineering, MBBS, MBA or Master in Geophysics/Geology courses run by the ONGC Limited (under CSR). NTPC Scholarship provides financial support to 2nd year Engineering students till their final year to SC/ST students.
- Rajiv Gandhi National Fellowship (RGNF) for SC/ST candidates funded by the Ministry of Social Justice & Empowerment and Ministry of Tribal Affairs financially assist students to pursue M.Phil. and Ph.D. degrees in Sciences, Humanities, Social Sciences and Engineering & Technology. Every year 2000 slots are open for SC and 667 slots for ST candidates for all subjects.
- In a major step taken by UGC to ensure that students belonging to the SC/ST category do not face discrimination, it notified a regulation i.e., "Promotion of Equity in Higher Education Institutions Regulation, 2012" to protect these students from harassment. Moreover, the UGC pressed the need to reassess and implement the "Education Quality Upgradation and Inclusion Programme (EQUIP)" to reduce the gap between the SC/ST and general category students. The establishment of study centres especially on social exclusion and inclusive policy will help to move

towards the path of inclusion and also links these centres with civil society organisations to abate social exclusion by teaching courses about social inclusion in Masters and Doctorate programmes. UGC has also decided to establish the Equal Opportunity Cell (EOC) with a one-time grant of Rs. 2,00,000 in universities, Rs 75,000 and Rs 55,000, respectively in UG and PG colleges. The EOCs are instructed to supervise the proper implementation of programmes and policies for the disadvantaged groups to provide guidance and counselling in areas linked to academia, financial and social matters (Agrawal, 2021).

Policy Suggestion

Hands-on experience in teaching and appropriate infrastructure helps enhance the students' skills, making them industry-ready. The focus must be made on improving critical thinking, analytical reasoning and problem-solving rather than memorizing and writing skills. There is a need to ensure a holistic, flexible, and multidisciplinary education that is affordable, inclusive, qualitative, and lays strong foundations for their personality development. Appropriate initiatives on different scholarship programmes for higher education would incentivize the Dalit sections. The candidates must avail the ample ongoing scholarship and fellowship programmes offered by the Government in the right sense. Awareness and proper guidance on the guidelines of these initiatives can be reiterated among the student community to ensure larger and active participation. Compulsory residential programmes in higher education for marginalized sections would be of great help. A small group mentoring system to take special care of Dalit students may be incentivized in higher education. Appropriate job opportunities for marginalized students after completing higher education programmes in India may encourage their enrollment and reduce dropout. Timely fulfilment of the posts in the said jobs must be done to avoid under-performance and under-representation of the community. Public policies towards marginalized groups must be sub-caste specific.

Conclusion

Education has been one of the prime focuses of the Indian state in its development programmes and welfare policies. Since independence, the subsequent governments have made efforts to improve educational opportunities and increase enrollment from primary to higher education and other technical education. Exclusion from obtaining an education is considered as the focal reason for the socio-economic backwardness of the SCs and STs in India. Scheduled Castes are a late entrant in higher education in India regarding students' enrollment and teachers in higher educational institutions. The state has adopted specific policy measures to reduce inequality in education and provide equal opportunities to avail education. The directive principles of state policy of the Indian constitution suggest the state protect the educational and economic interests of scheduled castes and scheduled tribes. The provision of reservation in educational institutions of scheduled castes and scheduled tribes have changed these communities' educational scenarios. However, educational developments of scheduled castes are unsatisfactory beyond primary school. Higher education for scheduled castes and scheduled tribes still remains a great challenge before the state and development actors.

REFERENCES

- Agrawal, S. (2021). With Fewer SC/STs Enrolling in College, House Panel Pulls up UGC for 'Under-Utilised' Measures. *The Print*. Retrieved from https://theprint.in/india/education/with-fewer-sc-sts-enrolling-in-college-house-panel-pulls-up-ugc-for-under-utilised-measures/607310/
- Das, P. (2021). Why are SC, ST and OBC Students not Well-Represented in India's Higher Education, *Indian Express*. Retrieved fromhttps://www.edexlive.com/news/2021/jun/14/why-are-sc-st-and-obc-students-not-well-represented-in-indias-higher-educational-institutions-21649.html
- Dhende, L. D. (2017). A Study of Scheduled Caste and Higher Education Scenario in India. *International Journal of*

- Engineering Technology Science and Research, 4(11), 345-351. Retrieved from http://www.ijetsr.com/images/short_pdf/1510646588_345-351-ietep959_ijetsr.pdf
- Hasan, R., & Mehta, A. (2006). Under-Representation of Disadvantaged Classes in Colleges: What Do the Data Tell Us? *Economic and Political Weekly*, 41(35), 3791-3796. Retrieved from https://www.jstor.org/stable/pdf/4418649.pdf
- Narwana, K. & Gill, A. S. (2020). Beyond Access and Inclusion: Dalit Experiences of Participation in Higher Education in Rural Punjab. *Contemporary Voice of Dalit, 12(2), 1-15.* Retrieved from https://sci-hub.zidianzhan.net/10.1177/2455328X20925592
- Rukmini, S. (2019). *India's Unequal University System*. Mint. Retrieved from https://www.livemint.com/news/india/still-too-few-dalits-in-indian-colleges-1568013598781.html
- Sahoo, P. (2021). Very Few PhD Students in Top Indian Institutes from SC, ST category: Data. *Hindustan Times*. Retrieved from https://www.hindustantimes.com/cities/mumbai-news/ very-few-phd-students-in-top-indian-institutes-from-scstcategorydata101612721331846.html
- Sharma, R. (2021). SC OBC Free Scheme: Registration at coaching. Retrieved from https://pmmodiyojana.in/sc-obc-free-coaching-scheme/
- Singh, J.D. (2011). Higher Education in India Issues, Challenges and Suggestions. Higher Education', Lambert Academic. Retrieved from https://www.researchgate.net/publication/282293148_Higher_Education_i n_India__ Issues_Challenges_and_Suggestions
- Singh, K. (2021). Deconstructing Merit: Dalit Presence in Higher Education. *Contemporary Voice of Dalit*, 13(2), 141-152. Retrieved from https://sci-hub.hkvisa.net/https://journals.sagepub.com/doi/abs/10.1177/2455328X21995738
- Vinod, M. J. & Kumar, S.Y. S. (2021). Empowering Marginalized Communities in India: The Impact of Higher Education, *Sage Publications Pvt. Ltd.*, pp.1-296. Retrieved from https://us.sagepub.com/en-us/nam/empowering-marginalized-communities-in-india/book280068



Contextualising Holistic Education in Indian Higher Education System

-Sameer Ahmad Wani¹ & Dr. Dharmendra Kumar Sarraf²

"The highest function of education is to bring about an integrated individual who is capable of dealing withlife as a whole".

-J. Krishnamurti

ABSTRACT

Indian higher education system is one of the major higher education systems in the world. The higher education has mainly imperious role in career development and helps to actualize occupational aspirations. Holistic education especially in higher education can provide better opportunities and success in shaping career. Although holistic education is central focus and prevalent in ancient Indian education system. In recent past more focus is being drawn in multidisciplinary approach of education which is dire need of our society. Education not only react to the changing society but it transforms the world. But to transform the present world, we need to move ahead from traditional approach of education and opt a new

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approach to education, which could bring our fragmented world together and help us in developing a better world. Major concerns of our society are continuous inequalities, political extremism, environmental issues and social fragmentation which has shaken the foundation of humanity and brought many societies to the point of crises. These crises cannot be solved without changing the mentalities of people and when it comes to changing the mentalities and enlightening the people we can only think of education, and can be best suited by holistic education to change the mind-set of people and ensure a sane world. UNESCO in its Sustainable Development Goal - 4 (SDG-4) suggests a holistic approach to education to promote harmonious development and a better world for all living beings. National Education Policy-2020 (NEP-2020) of India also suggests a holistic and multidisciplinary education system for all round development of learners which needs large scale transformation. Taking this into consideration the present study aims to, examine the concept of holistic education in context of Indian higher education system and also highlight the major recommendations of NEP-2020 regarding the holistic education in higher education.

Key Words: Holistic Education, Higher Education, NEP-2020, India

Introduction

The higher education ensures the human as well as societal wellbeing and plays an important role in the overall development of any nation which includes industrial, economic, social, cultural, political etc. (Lin, 2004; MHRD, 2020; Sharma & Sharma, 2015). Higher educations also play critical role in 'contributing to socially fair, economically viable, and environmentally protected world' (Serafini, et al., 2022, para.1). Indian higher education system is the second largest higher education system in the world and also second largest source for foreign students (Altbach, 2022). It is the main contributor in developing India as envisioned in Indian constitution. Higher education holds an important place in promoting the sustainable livelihoods and economic development of the nation. 21st century requires a new approach to education which will ensure quality higher

education for developing "good, thoughtful, well-rounded and creative individuals", quality higher education is key to "more vibrant, socially engaged, cooperative communities and a happier, cohesive, cultured, productive, innovative, progressive and prosperous nation" (MHRD, 2020, p. 33).

In present world there is fragmentation in everything (Miller, 2019). Mention can be made of; a) Social fragmentation, people even living in densely populated societies feel afraid and cut off, which results people abusing themselves in the form of drugs, b) Environmental fragmentation, people consider themselves as separate from surrounding environment and result is environmental devastation, c) 'Fragmentation within Ourselves' (Emerson, 1990, as cited in Miller, 2019), people find themselves disconnected from their body and their heart, d) Cultural fragmentation, lack of shared sense of meaning, lack of shared sense of values, lack of consensus (Campbell, 1986, as cited in Miller, 2019), and e) Fragmentation in Education, knowledge has been divided into subjects, units, lessons. The students cannot find relationship between these subjects, the relationship between facts within the subjects or the relevance of the subjects to their lives. And also Fragmentation in Classroom, classroom is fragmented on the basis of caste, gender, social class, financial status, ability, motivation, classroom behaviour, ethnicity, religion etc. (D'hondt, et al. 2021; Ghaffarzadeh, 2016; Gilgen, 2019; McDole, n.d; Somasundar, 2021). To solve these problems, we need to align our education system with the interconnection and dynamism of the world. Which could only be seen in the form of holistic education, a vision of education that knits together the fragmented planet, societies, people and knowledge. The UNESCO's 2030 agenda for sustainable development in its sustainable development goal-4 (SDG-4) i.e. quality education goal, suggests a holistic approach to education. This paper aims to define holistic education in context of higher education in India and also highlight the major recommendations of National Education Policy-2020 (NEP-2020) regarding holistic education in higher education.

Holistic Education

Holistic education is not any single method that could be implemented neither it is highly concerned with developing any specific practices rather it is more focused on changing assumptions about how to approach the education process? (Loveless, n.d.). "Holistic education is not to be defined as a particular method or technique; it must be seen as a paradigm, a set of basic assumptions and principles that can be applied in diverse ways" (Miller, 1992, as cited in Rudge, 2008, p. 6). Holistic education is a new paradigm that came to be known as field of study and practice in mid 1980s in North America (Miseliunaite, et al. 2022). Although there isn't a single definition for holistic education, however it can be explained by a variety of recurring themes seen in the literature. One such theme of holistic education is all-round development of the individual, which has been described by Singh: "Holistic education must acknowledge the multiple dimensions of the human personality - physical, intellectual, aesthetic, emotional and spiritual – thus moving towards the perennial dream of an integrated individual living on a harmonious planet" (Hare, 2006, p. 302).

Another theme of holistic education is theme of integration, wholeness and interconnectedness defined by Clark as: "The ultimate purpose of holistic education is to transform the way that we look at ourselves and our relationship to the world from a fragmented perspective to an integrative perspective" (Hare, 2006 p. 302).

Based on the work of Douglas Sloan, David Purcell, Ed Clark, Ron Miller, Phil Gang, Jack Miller, and Parker Palmer, a vision of holistic education was created that emphasises ecological awareness, spirituality, relationships, and values.

Another defining characteristic of holistic education is 'spirituality', that majority of the theorists of holistic education appear to agree. The likes of John Miller, Ron Miller, Nava, which are contemporary holistic educators, are of the opinion that the principle of spirituality is what differentiates holistic education from all other approaches of education. The holistic education movement typically advocates a broad, inclusive view of spirituality that is independent of any particular faith

or creed. It's a vision that may or may not include faith in a personal God. The holistic view of spirituality also differs in some ways from the New Age Movement, which has a more individualistic view of spirituality, emphasising personal empowerment and self-promotion. The spirituality in holistic education believes on four concepts – "belief that there is 'divine reality', we are all part of 'intricate web of life', 'there is purpose for every life in the universe' and 'there is a continuous plan of evolution in which we are all involved" (Rudge, 2008, p. 14).



Figure-1: Four Concepts of Spirituality

Therefore, holistic education is not a particular pedagogy or model that could be applied in the classroom rather it is something beyond that, it is a school of thought and a new emerging paradigm of education. The principles of holistic education are shown in the figure-2 below.

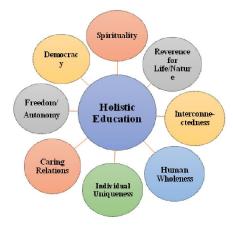


Figure-2: Principles of Holistic Education

Holistic Education in Indian Context

India has the rich history of education. It has been the centre of education during ancient period. Takshashila, Nalanda, Vikramshila, and Vallabhi were the world-class institutions which enrolled students from across the countries. The teaching was multidisciplinary and education was not just focused on acquisition of knowledge but for realization and liberation of self, ancient Indian educational system, developed over time and was centred on the holistic development of the person by caring for both the inner and outer self. The framework emphasised the physical, intellectual, moral and spiritual facets of life. It placed a strong focus on virtues like self-control, selfdiscipline, humility, and respect for all living things. Students were encouraged to value the harmony between nature and humans, it emphasised an individual's all-round development including physical, emotional, and psychological (Jain, et al., 2021; Kapur, 2021; MHRD, 2020; NCERT, n.d.). Jidu Krishnamurti and M.K Gandhi are considered as holistic educationists by theorists of holistic education (Martin, 2022; Miller, 2019). The above mentioned features of ancient Indian education and philosophies of Gandhi and Krishnamuti are what we call today as holistic education. However, no doubt during recent times the quality of education system has deteriorated (Jain, 2021). Now efforts are being made to revive the lost glory of education in India.

India is a developing country and for any developing country the higher education system holds the key for its development. It is higher education which produces the skilled human resources which leads country to new heights. According to the 'Youth in India 2022' report, youth in the age group 15-29 comprises 27.2% of population of India for the year 2021 (MOSPI, 2022). But on the other side the rate of unemployment has increased to 7.5% in 2020 from 4.9% in 2018 (TOI, 2023). That is why the focus of higher education has shifted to multidisciplinary and holistic approach to give students a variety of options to choose and make their living. Holistic education in Indian does not only mean all round

development of the individual but it focuses more on equipping individuals with skills that would make them economically independent in particular and contribute to the development of country in general. The theorists of holistic education give more importance to spirituality, which they found lacking in the mainstream education, however in India spirituality has been the central focus of education during ancient times, but in recent past we don't find so often spirituality in the higher education curriculum, due to hard separation of the disciplines. Now recently published visionary document National Education Policy-2020 (NEP-2020) has shifted the focus of higher education on multidisciplinary and holistic approach to do off with hard separation, so that students can get variety of opportunities and may be well equipped with the skills needed in 21st century.

NEP-2020 and Holistic Higher Education

The Indian higher education system is going through the process of large scale transformation. The NEP-2020 recommends total revamping and restructuring of higher education. The main goal of NEP-2020 is to change higher education institutions into multidisciplinary institutions in order to stop the fragmentation of higher education. The policy suggests a holistic higher education system. The recommendations of NEP-2020 regarding higher education are mainly based on two themes of holistic education, depicted through figure-3.

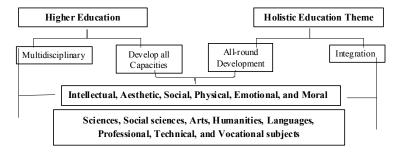


Figure – 3: Higher Education and Holistic Education Themes

NEP-2020 is of the opinion that, earlier in higher education less importance was given to cognitive skills and learning outcomes and the hard separation of disciplines narrow the areas for students (MHRD, 2020). To overcome this, it suggests a holistic and multidisciplinary higher education system. Which will focus on developing all capacities of individuals such asphysical, intellectual, social, aesthetic, emotional and moral. For the purpose of developing holistic individuals NEP-2020 recommends that a set of identified skills and values will be incorporated at every stage of learning. And also provide opportunities to individuals to develop 21st century capabilities across the fields including humanities, arts, languages, science, social science, professional, technical, vocational and also to develop soft skills. NEP-2020 highlights that holistic multidisciplinary education was prevalent in ancient Indian universities and found its account in Banabhatta's Kadambari which describes good education knowledge of 64 Kalaas (arts) and these Kalaaswere not only arts but also included the functional skills related to scientific, mathematical, vocational, professional and medical fields and it also included the soft skills. NEP-2020 believes that currently our country need exactly the same kind of education.

The policy stressing the need of holistic and multidisciplinary education, which it considers will be the driving force of the country to lead it into 21st century and fourth industrial revolution. It recommends that even engineering institutions will move towards holistic education imbibing more humanities and arts and students of arts and humanities to incorporate more science and vocational subjects. In the process of implementing the idea of holistic and multidisciplinary education NEP-2020 recommends, establishment of departments of "Philosophy, Languages, Music, Literature, Indology, Art, Dance, Theatre, Education, Mathematics, Statistics, Pure and Applied Sciences, Sociology, Economics, Sports, Translation and Interpretation" (MHRD, 2020 p. 37). UGC has already suggested guidelines for minimum course curriculum for undergraduate courses under choice based credit system (CBCS). The outline of CBCS contains core courses, elective courses (discipline specific elective course, dissertation/project, and generic elective course), and ability enhancement courses (ability enhancement compulsory course and skill enhancement course) at undergraduate level of studies (UGC n.d.). Depicted through fig-4.

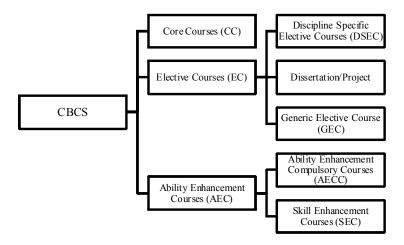


Figure- 4: Minimum Course Curriculum for Undergraduate Courses under Choice Based Credit System

The Curriculum for holistic higher education system will be flexible and innovative and shall include these credit-based courses, which will comprise of experiential learning in the fields of community engagement and service, environmental education and value based education. Students will also enjoy the option of multiple entry and exit. As the world becomes more interconnected, Global Citizenship Education (GCED), a response to current global challenges, will be offered in order to enable learners to become conscious of and knowledgeable about international issues as well as active proponents of more tranquil, tolerant, inclusive, secure, and sustainable societies.

Conclusion

The NEP-2020 stresses more on multidisciplinary approach of higher education, which give students a variety of options

of subjects to choose from according to their interest. And also focuses on all-round development of individual. NEP-2020 does not use the term 'Holistic Education' alone but at every place uses term 'Multidisciplinary' with it. That makes it bit difficult to understand what actually term holistic education stand for in NEP-2020 for higher education. However, it can be extracted from this that holistic education means to provide students opportunity of whole subjects and make it possible that all subjects are interconnected and also higher education should focus on all-round development of individual. The contribution of holistic education to the development of our country is undeniable. Today's holistically developing pupils will present themselves as tomorrows thought leaders. Holistic education has a long and rich history in India. All the stakeholders of education must work together to strengthen the ecosystem of holistic education and put Indian universities on the map of the world again. Let's work to recreate the history of Takshashila and Nalanda, and let the rest of the world benefit from our rich tradition of the best educational system.

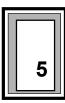
We found that holistic education is the new emerging paradigm of education at global level but India have rich history of it. However, the holistic theorists see holistic much more than a model or practice and lay more focus on spirituality, rather they believe that it is spirituality which differentiates holistic education from other systems of education, but NEP-2020 lays more stress on all-round development of individual with minimum focus on spirituality rather we do not find the mention of spirituality in NEP-2020 for holistic higher education. However, we find mention of value education which somewhat resembles with idea of spirituality advocated by holistic education theorists. So NEP-2020 sees holistic education in a different way and recommends a robust system of higher education and if implemented in letter and spirit will lead India towards new heights.

REFERENCES

- Altbach, P. G. (2022). *India's higher education is opening up. But is it ready?* University World News, The global window on higher education. Retrieved from https://www.universityworldnews.com/post.php?story=20221102093858736
- D'hondt, F., Maene, C., Vervaet, R., Houtte, M., & Stevens, P. (2021). Ethnic discrimination
- in secondary education: Does the solution lie in multicultural education and the ethnic school composition? *Social Psychology of Education*. 1231–1258. https://doi.org/10.1007/s11218-021-09651-w
- Ghaffarzadeh, M. (2016). A Comparative Study of Discrimination in Education: The Learning Environment and Behaviours of Students and Teachers in Iran. *IAFOR Journal of Education*, 4(2), 34-46. https://doi.org/10.22492/ije.4.2.02
- Gilgen, S. (2019). Discrimination at School? When Stereotypes Affect Track Recommendations. Retrieved from file:///C:/Users/ sameh/Downloads/discrimination% 20article_latest%20 version.pdf
- Hare, J. (2006). Towards an understanding of holistic education in the middle years of education. *Journal of Research in International Education*, 5(3), 301–322. https://doi.org/10.1177/1475240906069453
- Jain, S., Choudhary, S. & Philip, J. (2021). Revival and Resurgence of Our Lost GEM The Ancient Indian Education System. *International journal of education*, *9*(4), 382–388. Retrieved February 05, 2023 from https://files.eric.ed.gov/fulltext/EJ1309706.pdf
- Kapur, R. (2021). Understanding the System of Education in the Ancient Period in India. Retrieved from https://www.researchgate.net/publication/356536063
- Lin, T. (2004). The role of higher education in economic development: an empirical study of Taiwan case. *Journal of Asian Economics*, 15(2), 355-371. https://doi.org/10.1016/j.asieco.2004.02.006
- Loveless, B. (n.d.). Holistic education: a comprehensive guide. *Education Corner*. Retrieved from https://www.education.corner.com/holistic-education.html

- McDole, A. (n.d.). Discrimination in the College Classroom. *Journal of Student Research at Indiana University East*, 3(1), 110-125. Retrieved from https://scholarworks.iu.edu/journals/index.php/jsriue/article/view/31799
- Martin, R. A. (2022). Holistic Education and Krishnamurti: An Interview with Scott H. Forbes. *Holistic Education Review*, 2(2). Retrieved from https://her.journals.public knowledge project.org/index.php/her/article/view/2420/2306
- MHRD, (2020). National Education Policy-2020 (NEP-2020). Retrieved From https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Miller, J. P. (2019). *The Holistic Curriculum, Third Edition*, Toronto: University of Toronto Press, https://doi.org/10.3138/9781487519506
- Miseliunaite, B., Kliziene, I. & Cibulskas, G. (2022). Can Holistic education solve the World's problems: A systematic literature review. *Sustainability*, 14(15). https://doi.org/10.3390/su14159737
- MOSPI, (2022). Youth in India 2022 report. Retrieved from https://www.mospi.gov.in/web/mospi/reportspublications//reports/view/templateFive/29601?q=RPCAT
- NCERT, (n.d.). Ancient education system of India. Retrieved from https://ncert.nic.in/textbook/pdf/heih111.pdf
- Rudge, L.T. (2008). Holistic education: an analysis of its pedagogical application. Retrieved From https://dlwqtxts1xzle7.cloudfront.net/7944158/rudge_lucila_tlibre.pdf? 1390853616
- Somasundar, M. (2021). Perceived Discrimination and Students' Behavioural Changes: The Role of Cultural Background and Societal Influence. *IAFOR Journal of Education: Studies in Education*, 9(6), 31-49. Retrieved from https://files.eric.ed.gov/fulltext/EJ1329186.pdf
- Serafini, P., Moura, J., Almeida, M. & Rezende, J. (2022). Sustainable Development Goals in Higher Education Institutions: A systematic literature review. *Journal of Cleaner Production*. 370. Retrieved February 02, 2022 from https://doi.org/10.1016/ j.jclepro.2022.133473
- Sharma, S. & Sharma, P. (2015). Indian Higher Education System: Challenges and Suggestions. *Electronic Journal for Inclusive*

- Education, 3(4). Retrieved January 29, 2023, from https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1179&context=eje
- TOI, (2023). Is India's rapidly growing youth population a dividend or disaster? Retrieved on February 05, 2023 from https://timesofindia.indiatimes.com/india/is-indias-rapidly-growing-youth-population-a-dividend-or-disaster/articleshow/97545222.cms
- UGC, (n.d.). Minimum Course Curriculum for Undergraduate Courses under Choice Based
- Credit System. Retrieved February 10, 2023 from https://ugc.ac.in/pdfnews/8023719_Guidelines-for-CBCS.pdf



Mathematics in Higher Education: A New Perception

-Rachna¹ & Hemant Sharma²

ABSTRACT

Higher education is extremely important in promoting human and societal well-being, and we need high-quality holistic and multidisciplinary education. The quality of higher education must aim to develop good, thoughtful, well-rounded, and creative individuals. India's higher education has a vibrant history and culture, but presently it is not effective. If the proper applicability and importance of the subject is known to students then it will be helpful for them. The purpose of higher education is therefore more than the creation of greater opportunities for individual employment. Qualitative growth is missing, hence, we need to focus on the application or practical aspects of education. NEP-2020 focuses on teaching mathematics in higher education as it is the base of most of the subjects and upcoming professions that will involve artificial intelligence, machine learning, and data science. At various levels, mathematics has been practiced, learned, and taught in India. This paper addresses the challenges of mathematics teaching in higher

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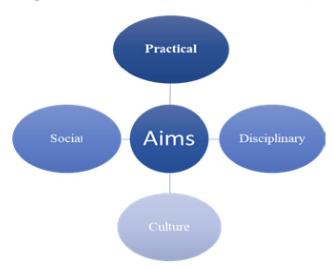
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education and what potential solutions we can adopt for quality mathematics teaching. How application-based teaching helps in improving education quality and fulfilling the demand for employment. It is important to develop in students the competencies of culture and expression. How is mathematics education linked with culture?

Keywords: Mathematics Teaching, Higher Education, Culture, Application Based Teaching

Introduction

The term 'higher education' with respect to India denotes the tertiary level education that is imparted after 12 years of schooling (10 years of primary education and 2 years of secondary education). Central University, State University, Deemed University, Private University, Institute of National Importance. There are around 42,000 institutions and over 1000 universities that make up India's whole higher education ecosystem, which offers top-notch instruction. These organizations are all governed by the Ministry of Education (Study in India, 2018). In higher education, there were 2.12 crore (51.3%) male students and 2.01 crore (48.7%) female students. Male enrollment was 1.96 crore students in 2019-20, while female enrollment was 1.89 crore (Aishe, 2021). This paper focuses on Mathematics in Higher education, the meaning of "mathematics" comes from two Greek words: "manthanein," which means "learning," and "techne," which means "an art or technique." Math is hence the art of learning pertaining to subjects or faculties. It is a systematic examination of amount, arrangement, and shape. According to different authors. Kant said that "Mathematics is the indispensable instrument of all physical resources." Bacon said, "Mathematics is the gateway and key to all sciences." Aristotle said, "Mathematics is the study of quantity." A concise and meaningful definition of mathematics is difficult and the field of mathematics is in agreement that there is no joint definition of what mathematics is (Ascher & D'Ambrosio, 1994; Joseph, 2010; Stinson & Walshaw, 2017). Mathematician and ethnomathematician Ascher claimed that "mathematicians, as such, rarely define mathematics" (p. 37) and that when they do, their definitions are either very broad or very narrow. Mathematics is a Science of discovery, an intellectual Game, systematic deductive science, experimental, inductive science, application of rules and concepts to new situation (Somashekar et al., 2015).



Culture plays a significant role in people's lives. Culture reflects how people live, behave, dress, eat and drink, rear their children and maintain social relationships. If we link culture with mathematics then critical thinking skills are developed, as critical thinking skills are required to solve a problem that is faced in daily life (Zakaria, 2007; A.k. Uswatun, 2016; Isjoni, 2010). Culture helps in developing problem solving ability in mathematics in school children (Imswatama &lukman, 2018). The mode of living of the members of a society is greatly determined by the scientific and technological advancements, which in turn depend upon the progress and development of mathematics. Hogben says "Mathematics is the mirror of civilization" Mathematics also helps in the preservation and transmission of cultural traditions and teacher can transmit culture to younger generation by teaching them and cultural aims are summarized as:

- 1. To enable the learner to appreciate the part played by mathematics in the culture of the past and that it continues to play in the present world.
- 2. To enable the student to appreciate the role played by mathematics in preserving and transmitting our cultural traditions.
- 3. To enable students to appreciate various cultural arts like drawing, design making, painting, poetry, music, sculpture and architecture.
- 4. To develop in the individual and aesthetic awareness of mathematical shapes and patterns in nature as well as the products of our civilization.
- 5. To make the learner aware of the strengths and virtues of the culture is inherited.

Competencies of Mathematics

Ability to ask and answer question about and by means of mathematics	Ability to deal with mathematical language and tool	
Mathematical ThinkingProblem SolvingModelingReasoning	 Representation Symbol and formalism(Culture) Communication(Culture) Aid and tool 	

Challenges of Mathematics in Higher Education

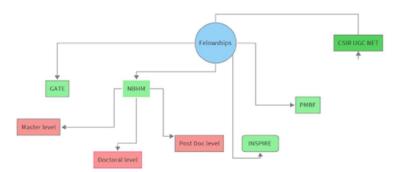
- The students who complete their studies of UG and PG programmes do not have much *employability* in the job market as they have not proper awareness.
- Conventional, poorly organized classroom instruction combined with poor presentational skills negatively affects students' interest
- Years have passed during which the curriculum has remained mostly unchanged, while changes and trends in society occur quickly. If the changes are implemented then teachers are not updated according

to the need and demand of students and current situation.

- Lack of freedom at work or insufficient time to work creatively prevent the opportunity to seek out fresh information. Even good professors lack this kind of academic freedom to influence pupils' future careers.
- Teachers use traditional methods of teaching, due to this students lose their interest in the subject.
- *Quality and visionary approach* development always starts from the top level of management, but it is not sufficiently present in the head of the institute, college administration, or university chairpersons. Even the top of the institute at any college and University are unaware of rules, government initiatives.
- Less emphasis is given on Holistics development, a holistic education aims to develop all capacities of human beings- intellectual, aesthetic, social, physical, emotional and moral in an integrated manner (MOE, 2020).

Potential Solution of Quality of Mathematics Teaching

Awareness of the government schemes and programmes are very crucial among the teacher communities followed by students. So below are some initiatives (Fellowships, training programs) of the government and other institutes in order to raise the quality of higher education in India.



Mathematics Training and Talent Search Programme (MTTS) has been funded by the National Board for Higher Mathematics (NBHM), an apex body of the Department of Atomic Energy, Government of India. MTTS believes in the overall development of the Students. MTTS focuses on promotion of self-study, promotion of thinking, concentration, confidence, creativity, problem solving, understanding concepts, social values, group discussion, development of skills(writing, listening, teaching) making presentations in front of experts. It provides an academic programme of Level-O, Level-I and Level-II meant for B.Sc. 2nd year, B.Sc. 3rd Year, and M.Sc. 1st year students. Online foundation courses in mathematics every year. Pedagogical training for mathematics teacher(PTMT), Initiation into mathematics(InitMaths) (MTTS,2023)

Initiative for Women in the Field of Mathematics in Higher Education

S.No	I nitiatives	Categories
1	Fellowships	 WISE-Post Doc DST → WOS-A → WOS-B UG Post Graduate Indira Gandhi scholarship for single girl child for P.G Project Saras wa ti award scholarships
2	IWM(IndianWomen and Mathematics)	Conferences, Symposium organized all over India for women.

Application Based Teaching in Improving Quality of Mathematics in Higher Education

Application based teaching makes the subject relevant and interesting to the students. It gives a treat to its inquisitive buds, which builds a sense of basic understanding of the subject as why a particular subject is taught and why it is important to a

student. If we compare the mathematics syllabus which has been taught in intermediate and undergraduate level, we find drastic change i.e. we find a combination of theoretical math along with long differential equations and other complexities. So, making the subject relevant, application based teaching is effective and the advantage of this process is that students will be clear about the job orientation. Mathematics due to its wide application is used in most of the fields and some of them are listed below.

Area	Specific areas	What math being used	Being taught at level
Computer Science	AI	Multivariate Calculus, optimization etc.	Under graduation
	Data Science	Linear algebra, probability and Statistics.	Under graduation
	Image processing	Linear Algebra, Fourier transforms.	Under graduation
	Cryptography	Calculus, Group Theory, Fourier Transforms etc.	Undergra duation
C om merce	Banking	Mathematical modelling, optimization.	Under graduation
	Financial Analyst	Calculus, Statistics.	Undergra duation
	Chartered Accountancy	Calculus, Algebra, Arithmetic etc.	Under gra duation
He alth Care	Epidemiologists	Statistics , Data Analysis	Undergra duation
Economics	Statistical of ficer	Mathematical Undergraduation Modelling, Statistics.	

Culture and Mathematics

India is a culturally rich country which has the most diversified culture; along with this it is the youngest country in the world, where more than 65% of the population is below

the age of 35(citation 5) (Telling Numbers: Over Half of India's Population Is Still Under Age 30, Slight Dip in Last 5 Years, 2022). Originally India was known for its culture, ethical and spiritual values, but now if we see the youth especially when youth enters to pursue higher education in the city nearby, the amount of exposure is very high as compared to their hometown/village. The tendency to fall for destructive allurement is high. Here, comes the role of cultural values that why one should not fall for asinine pleasures and instead build an impregnable character which can lead one's life progressively and guide others as well. From the life of many mathematicians, we can find leadership qualities like discipline, integrity, creativity, innovation, humility and patience. In today's scenario we are in great need of these qualities amongst youth which teaches them how to handle failures and stress. We have an example of little girl named Lilavati, how she was stressed in her early days of life but her father Bhaskaracharya lead her to a life of happiness and joy with the help of mathematics. Later in life she was tremendous in the subject and was easily performing calculations of numbers involving 17 digits which today we are unable to do with a normal calculator.

Another legendary example is Ramanujan, how he adhered to his culture despite facing great difficulties and did a magnificent work on number theory. Few decades back we saw Shakuntala Devi how she stood up despite struggles in her life although she was an astrologer along with it she was considered to be a human calculator and published several books on astrology and calculations (Devi,2015).

Teachers at higher education level should try to develop interest in the subject by telling students about the stories and work of especially Indian mathematicians, so that they can understand subject along with cultural values and small project assignment should give to students so that they search on internet about the legacy they have left out for us, not all will be fascinated but it will strike the right person in this process.

Application based teaching is highly recommended for making the subject relevant which can be done by giving small projects/mathematical models which will help students with real life application of what they are reading in the classroom. UNESCO world heritage has many temples/monuments marked in India and other such structures of national importance can also be studied as a mathematical model and students can learn style of architecture, culture of respective kingdoms, geography of the place etc.

Considering the methods mentioned above one can easily teach the subject as mathematics is considered to be one of the toughest subjects. Fear /hatred or love for any subject totally depends upon how it is being taught by the teacher. We have seen recently that Mr. Yakub S from Karnataka received a national award for teaching at high school in 2022, has applied the same methodology and Serge Lang, professor at MIT uses mathematical models to teach in the classroom to undergraduates (Strang, 2019.).

Conclusion

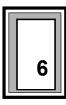
The enrollment of students in higher education is declining and the reason behind this is the various challenges faced by students, teachers and institutions. Paper focused on the challenges of mathematics in higher education, some of the challenges are that there is no proper infrastructure, no resources, no proper training of teachers, using same traditional techniques of teaching and students are not aware of the practicability of the subject and various scholarships provided by government for increasing the quality and enrollment and separate scholarship has been provided for women as the enrollment of women in mathematics is less than that of men. Mathematics is the base of most of the subjects but only theoretical knowledge is imparted. Students are unaware of applications of this subject in other fields and the importance of it for employment. NEP-2020 talked about how students should be taught by linking them with their culture in school education. Many researches have been done in ethnomathematics where culture is linked with mathematics at school level but limited research has been done in higher

education, so there is a need to explore more in ethnomathematics in higher education. In this way, students learn the diversified culture of India, which will make the subject more interesting and enjoyable.

REFERENCES

- Ascher, M.& D'Ambrosio, U. (1994). *Ethnomathematics: A dialogue*. ERIC, 14(2), 36-43.Retrieved from https://eric.ed.gov/?id=EJ502150
- Devi, S. (2005). Astrology for you. Orient paperbacks. Retrieved from https://openlibrary.org/books/OL13132045M/Astrology_for_You
- Imswatama, A., & Lukman, H. S. (2018, December 8). The Effectiveness of Mathematics Teaching Material Based on Ethno mathematics. *International Journal of Trends in Mathematics Education Research*, 1(1), 35–38. https://doi.org/10.33122/ijtmer.v1i1.11
- Innovation in Science Pursuit for Inspired Research (INSPIRE) (n.d.). INSPIRE Programme. Ministry of science and technology. Retrieved February 9, 2023 from https://online-inspire.gov.in/Account/INSPIREProgramme
- Joseph, G.G. (2010). The crest of the peacock (3rd ed). Princeton University Press. Retrieved from https://press.princeton. edu/books/paperback/9780691135267/the-crest-of-the-peacock
- Kumaresan (n.d.). *Mathematics Training and Talent Search Programme*. MTTS Trust. Retrieved February 9, 2023, from https://mtts.org.in/ Mathematics, 14(2), 36–43.
- Ministry of Education (2020). *National education policy 2020*. Government of India. Retrieved fromhttps://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Ministry of Education (2021). *All India survey on higher education*. Government of India.
- Retrieved from https://aishe.gov.in/aishe/home
- Patwardhan, K. (2017). Lilawati of Bhaskracarya: A Treatise of Mathematics of Vedic Tradition (5th Ed.). Motilal Banarsidaas

- Publishing House. Retrieved February 7, 2023 from https://studyinindia.gov.in/about-indian-higher-education#:~:text=The%20term%20'higher%20education'%20with,2%20years%20of%20secondary%20education
- Singh, A. (2018). Mathematics is a toughest subject, not taught well in School: A survey. *NDTV NEWS*. Retrieved February, 9, 2023 from https://www.ndtv.com/education/mathematics-toughest-subject-not-taught-well-in-school-survey-1866951
- Somashekar, T.V., Visanathappa, G.& James, A. (2015). *Methods of Teaching Mathematics*. Neelkamal Publications Pvt. Limited. Retrieved from https://www.neelkamalbooks.com/books/methods-of-teaching-mathematics/
- Strang, G. (2019). *An interview with gilbert strang on teaching linear algebra*. You Tube video. Retrieved February, 9, 2023 from https://www.youtube.com/watch?v=7UJ4CFRGd-U
- Zeidmane, A. (2013). Development of Mathematics Competences in Higher Education Institutions. *International Journal of Engineering Pedagogy (iJEP)*, 3(S2), 11–17. DOI: https://doi.org/10.3991/ijep.v3iS2.2394



Techno-Pedagogical Competence: A Critical Factor in Revamping Teacher Education for the Digital Era

-Khalid Bashir Hajam¹ & Prof. Shamim Ahmad²

ABSTRACT

The expeditious technological advancement and effortless exposure of young learners to it have undoubtedly increased the challenges for the contemporary teaching profession. To pace with the learning requirements of 21st-century knowledge seekers, it has become indispensable for teachers to integrate technology into pedagogical practices. For this to happen, the pedagogues must have the expertise to incorporate technical skills into their daily instructional practice. The present article aims to conceptualize Techno-Pedagogical competence and its manifestation in revamping teacher education. The researchers delved into illustrating the meaning of Techno-Pedagogical competence as an effective amalgamation of technology into teaching and learning and as a combination of technological, pedagogical, content awareness and the capability to use it to design,

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implement, and evaluate technology-enhanced learning experiences. Research shows that the professional development of educators with technological unification can lead to improved techno-pedagogical competence encouraging optimum use of technology in the classroom, lowering technostress, and imbibing a positive attitude towards constant digitalization. The research paper meticulously exposed the various contemporary techno-pedagogical models which could be implemented to reconstruct teacher education, providing ongoing vocational maturation opportunities for teachers to stay current with new technologies and helping them to be equipped to use ICT to enhance student learning and engagement.

Keywords: Techno-Pedagogical Competence, ICT, 21st Century, Teacher Education.

Overview

"If a country is to be corruption free and become a nation of beautiful minds, I strongly feel there are three key societal members who can make a difference. They are the Father, the Mother and the Teacher."

-Dr. A.P.J. Abdul Kalam

Teachers play a critical role in education as they deliver instruction and facilitate learning for their students. They are the primary drivers of educational outcomes, as they directly impact student achievement and the development of critical thinking, problem-solving, and other essential skills (AACTE, 2010). Effective teaching is a complex and challenging profession, requiring a broad range of skills, knowledge, and attitudes. Teachers must have a deep understanding of their subject matter and the ability to create engaging and meaningful learning experiences for their students (Guerriero, 2014). The expeditious technological advancement and effortless exposure of young learners to it have undoubtedly increased the challenges for the contemporary teaching profession. To pace with the learning requirements of 21st-century knowledge seekers, it has become indispensable for teachers to integrate technology into pedagogical practices. For this to happen, it is obvious to equip the present teachers with technical skills and upgrade the contemporary teacher education programs to prepare individuals to become effective teachers. This includes formal academy training and practical experience that provide teachers with the skills, knowledge, and attitudes they need to succeed in the classroom. Teacher education programs typically include coursework in subjects such as educational theory, instructional design, and assessment and practical experiences such as student teaching and other clinical placements. Teacher education aims to equip teachers with the knowledge and skills they need to effectively deliver instruction and support student learning (Wrenn & Wrenn, 2009). The National Council of Teacher Education (1998) defined teacher education as a program of education, research, and training of persons to teach from pre-primary to higher education level. Teacher education is a program related to teacher proficiency and competence development that would enable and empower the teacher to meet the profession's requirements and face the challenges therein. Teacher education includes teaching skills, pedagogical theory, and professional skills.

Technology integration in teacher education programs is becoming increasingly important as technology plays an increasingly significant role in teaching and learning. Technology can support teacher education in several ways, such as:

- Providing access to resources: Technology provides teachers with access to a wealth of educational resources, such as online lesson plans, educational videos, and interactive simulations. These resources can help teachers stay updated with the latest teaching methods and deepen their understanding of the subjects they teach.
- Enhancing professional development: Technology can provide teachers with access to online professional development opportunities, such as online courses, Webinars, and virtual professional learning communities. These resources can help teachers to build their skills

- and knowledge and to stay up-to-the-mind with the latest development in their field.
- Supporting hands-on learning: Technology can provide teachers with opportunities to get hands-on experience with digital tools and platforms, such as educational software and online learning management systems. This can help teachers better understand how technology can be used to support teaching and learning and develop the skills and knowledge they need to integrate technology into their teaching practices effectively.

Providing opportunities for collaboration: Technology can provide teachers with opportunities to collaborate with their peers and other education professionals, both within and outside their Institutions. This can help build a community of practice via teachers can share ideas, resources, and best practices and supporting one another in their professional growth (Sana et al., 2018).

Technology has the potential to play a significant role in teacher education by providing teachers with access to resources, enhancing professional development, supporting hands-onlearning, and providing opportunities for collaboration. By incorporating technology into teacher education programs, we can help to prepare teachers to integrate technology into teaching practices effectively and to support student learning in the 21st century.

Techno-Pedagogical Competence

Techno-pedagogical competence can be traced back to the early days of educational technology when computers and other technology devices began to be used in classrooms. In the 1960s and 1970s, the use of computers in education was primarily focused on drill and practice activities and basic programming. In the 1980s and 1990s, the focus shifted to using technology for multimedia and interactive instruction and integrating technology into the curriculum (Bruckner, 2015). The use of technology in education continued to evolve with the advent

of the internet and the World Wide Web. The integration of the internet into education brought about new opportunities for collaboration and communication, as well as access to a vast array of digital resources and tools. With the rise of mobile technology and the proliferation of smartphones and tablets, the concept of "bring your own device" (BYOD) emerged, and the distinction between personal and professional technology became increasingly blurred (Cook & Sonnenberg, 2014). In recent years, techno-pedagogical competence has become increasingly important as technology plays an increasingly important role in education. Technology integration into education is often referred to as "EdTech" and has become a significant area of research and development in the education field (Islam, 2020). As a result, techno-pedagogy has emerged as a new field of study, which aims to understand how to use technology to support teaching and learning and to develop the skills and knowledge needed to do so effectively.

Techno-pedagogical competence refers to the ability of individuals, particularly teachers, to effectively use technology to support teaching and learning. This competence involves having a deep understanding of the educational potential of technology, as well as the skills and knowledge necessary to integrate technology into teaching practices effectively. It is the ability to design, implement, and evaluate technology to enhance the learning environment, remote student engagement, and motivation (Ertmer & Ottenbreit-Leftwich, 2010). Similarly, Voogt et al. (2013) illustrated techno-pedagogical competence as the ability to use technology effectively in teaching, learning, and assessment and to design, develop, implement, and evaluate technology-based learning activities and environments. Furthermore, it is the ability to design and implement technology-enhanced learning environments that promote student learning, evaluate the impact of technology on student learning, and caliber to use technology to support the teaching and learning process (Tondeur et al., 2018). Thus, Technopedagogical competence is a multi-faceted concept involving technology, pedagogical knowledge, technical skills, and reflective practice. By developing Techno-pedagogical competence, individuals, particularly teachers, can effectively integrate technology into their teaching practices to support student learning and maximize the educational potential of technology.

To comprehend the concept of techno-pedagogical competence, it is necessary to delve into its conceptual framework, including several key elements, such as:

- Pedagogical knowledge: This refers to knowledge of teaching and learning methods and the ability to design and implement effective instruction.
- *Technological knowledge:* This refers to knowledge of various technology tools and platforms and the ability to use them in the classroom to support student learning and engagement.
- Pedagogical-technological integration: This refers to integrating technology into instruction to support student learning and engagement and align with pedagogical goals.
- *Curriculum design* refers to the ability to design and implement technology-enhanced lessons and assessments that align with curriculum goals.
- *Professional development:* This refers to the ongoing process of staying current with new and emerging technologies and being able to use them to improve instructions.
- *Evaluation and assessment:* This refers to the ability to evaluate and assess the effectiveness of technology-enhanced instruction and to use the results to improve instruction.
- Collaboration: This refers to collaborating with colleagues and other stakeholders to support technology integration into instruction.
- *Digital citizenship:* This refers to knowledge of ethical and responsible use of technology, including issues related to online safety and privacy.

This framework is not set in stone, and different researchers and authors may have different elements that they include, but

the above elements are commonly considered the main components of a conceptual framework of techno-pedagogical competence.

Techno-Pedagogical Competence and Teacher Education

Techno-pedagogical competence plays a crucial role in teacher education in the 21st century. There have been several studies on techno-pedagogical competence and teacher education, which have found that teachers with higher levels of techno-pedagogical competence were more likely to integrate technology in meaningful ways in their teaching and that this had a positive impact on student learning (Koehler & Mishra 2008). A study by Sharma & Saarsar (2020) found that teachers with higher levels of techno-pedagogical competence were more likely to use technology in ways that enhanced student engagement and motivation. Similarly, Thakur (2015) concluded that teachers with higher levels of technopedagogical competence were more likely to use technology in ways that supported collaboration and problem-solving among students. Ertmer & Leftwich (2010) also examined that teachers who received professional development in technopedagogical competence were more likely to integrate technology effectively in their teaching practice. Furthermore, Nguyen et al. (2022) found that pre-service teachers who received training on how to integrate technology into their teaching practice were more likely to use technology in their classrooms and reported more positive attitudes toward technology integration, while Kim et al. (2018) concluded that in-service teachers who received professional development on techno-pedagogical competence were more likely to use technology in the teaching and reported that their students had better learning outcomes. In general, studies have shown that teacher education programs must include technical training and the pedagogical aspects of technology integration to support

teachers in developing their techno-pedagogical competence. Long-term professional development opportunities and mentoring are essential in helping teachers to integrate technology into teaching effectively.

NEP 2020: Teacher Education and Techno-Pedagogical Competence

The National Education Policy (NEP) 2020 in India strongly emphasizes the development of techno-pedagogical competence among teachers. This includes the integration of technology in teaching and learning, as well as the development of digital literacy among teachers. The NEP also calls for revamping teacher education programs to incorporate these new competencies and for ongoing professional development opportunities for teachers to keep their skills and knowledge up to date. Technology integration in teaching and learning, including digital and online resources, is emphasized as a critical aspect of techno-pedagogical competence. The NEP calls for the development of digital literacy among teachers, including the ability to use digital tools and platforms for teaching and learning, as well as for communication and collaboration. The NEP proposes modifying teacher education programs to incorporate the latest pedagogical and technological advances and to provide opportunities for teachers to develop techno-pedagogical competence. It also recommends using technology-based tools for teacher recruitment, training, professional development, and assessment of teachers' skills and knowledge. It further calls for the establishment of a National Professional Standards for Teachers (NPST) to ensure the quality of teacher education programs and provide guidance for the development of teachers' professional skills and knowledge as well as the implementation of the Continuous Professional Development (CPD) program for teachers to keep their skills and knowledge contemporary (NCERT, n.d.)

Revamping Teacher Education through Technopedagogical Competence

Successful Techno-pedagogical competence in teacher education prepares teachers to effectively integrate technology into their teaching practices and support student learning. This can involve providing teacher candidates with opportunities to learn about different technologies and their potential uses in education and giving them hands-on experience using them in the classroom (Kumari & Rani, 2022). Additionally, teacher education programs may also focus on developing other related competencies, such as digital, media, and information literacy, which are essential for integrating technology into education (U.S. Department of Education, 2017). By including technopedagogical competence as a core component of teacher education, teacher education programs can ensure that teachers are prepared to use technology in ways that enhance student learning and engagement and that they can effectively assess and evaluate the impact of technology on student learning outcomes (Bansal, 2022). Moreover, teacher education programs should incorporate instruction on effectively integrating technology into teaching practice, such as how to design and deliver technology enhanced lessons, use digital assessment tools, and support students' digital literacy skills (Evans, 2021). Creating a continuous learning and collaboration culture is also important for ensuring teachers stay updated with contemporary technology and pedagogy. This could include opportunities for teachers to attend conferences, workshops, and webinars, and opportunities to share their knowledge and experiences with their colleagues through communities of practice (Singh et al., 2021). Thus, teacher education programs should be continuously evaluated and assessed to ensure that they effectively prepare teachers for using technology in the classroom. This could include gathering data on teachers' use of technology in the classroom, as well as assessing the impact of technology on student learning outcomes.

Concluding Remarks

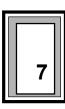
Digitization of education, particularly ensuring the proliferation of virtual learning, has gained total momentum now. A new dawn has set in the teaching world, where apart from academic excellence, a tutor has to be technologically wellversed in churning out meritorious talent from his flock. It is a common phenomenon now that pedagogical learning is no more the domain of physical classes. It has assumed full shape in the form of online learning, where global boundaries and borders have been penetrated. However, the most significant setback holding back the blooming of virtual teaching is the lack of complete resources for the teachers. Their unacquainted knowledge of digital education is putting brakes on their speed. Therefore, acquainting teachers with all the nuances of technopedagogy is the need of the hour if students from even the remotest corners have to be brought on the board. Raising full awareness among the teachers and exposing them to all the features of virtual learning should be prioritized. We can no longer sit in the room, waiting for change to happen outside. The government must allocate a robust share of the budget to the education sector, with a good share reserved for digitization.

REFERENCES

- AACTE. (2010). 21ST Century Knowledge and Skills in Educator Preparation. https://files.eric.ed.gov/fulltext/ED519336.pdf
- Bansal, S. (2022). Role of Techno-Pedagogical Skills for Enhancing Teaching and Learning. *Journal of Positive School Psychology*, 6(2), 3785-3793.
- Bruckner, M. (2015). *Educational Technology*. Doi:10:13140/2.1.2180.9449.
- Cook, C. W. & Sonnenberg, C. (2014). Technology and online education: Models for change. *Contemporary Issues in Education Research (CIER)*, 7(3), 171-188.
- Ertmer, P. A. & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of research on Technology in Education*, 42(3), 255-284.

- Evans, D. (2021, February 16). *How to use technology to help teachers be better and to make life better for teachers.* World Bank Blogs. https://blogs.worldbank.org/education/how-use-technology-help-teachers-be-better-and-make-life-better-teachers
- Guerriero, S. (2014). Teachers' pedagogical knowledge and the teaching profession. Teaching and Teacher Education, 2(1), 7.
- Islam, S. M. (2020). Infusion of Techno-Pedagogy during Covid-19: Teacher's Perspective. *International Journal of Creative Research Thoughts*, *8*(11), 3660-3670.
- Kumari, P. & Rani, M. (2022). Techno-Pedagogical Skills of Teacher Educators with special reference to E-Learning. *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, 10(4), 550-552.
- Mishra, P. & Koehler, M. J. (2008, March). *Introducing technological pedagogical content knowledge*. In annual meeting of the American Educational Research Association (pp. 1-16).
- National Council for Teacher Education (1998). *Curriculum Framework for Quality Reacher Education*. New Delhi, NCTE.
- National Council of Educational Research and Training. (n.d.). *Use of Technology in Enhancing access, Equity, and Equality.* Retrieved from https://www.education.gov.in/shikshak parv/docs/NCERT.pdf
- Nguyen, G. N., Bower, M. & Stevenson, M. (2022). The discourse of design: Patterns of TPACK Contribution during preservice teacher learning design conversations. *Education and Information Technologies*, 27(6), 8235-8264.
- Sana, S., Adhikary, C. & Chattopadhyay, K. N. (2018). *INQUISITIVE TEACHER*, 5(2), 174-188.
- Sharma, H. & Saarsar, P. (2020). Techno-Pedagogy Skills in Teacher Education. *Paradigm Shift and Evolving Teacher Education*, 1, 97-108.
- Singh, J., Steele, K. & Singh, L. (2021). Combining the best of online and face-to-face learning: Hybrid and Blended learning approach for COVID-19, post vaccine, & post-pandemic world. *Journal of Educational Technology Systems*, 50(2), 140-171.

- Thakur, N. (2015). A study on implementation of technopedagogical skills, its challenges and role to release at higher level of education. *American International Journal of Research in Humanities, Arts and Social Sciences, 9*(2), 182-186.
- U.S. Department of Education. (2017). *Reimagining the Role of Technology in Education*. Educational Technology.Retrieved from https://tech.ed.gov/files/2017/01/NETP17.pdf
- Voogt, J., Fisser, P., Roblin, N. P., N., Tondeur, J. & Van Braak, J. (2013). Technological Pedagogical Content Knowledge a review of the literature. *Journal of Computer assisted learning*, 29(2), 109-121.
- Wrenn, J. & Wrenn, B. (2009). Enhancing learning by integrating theory and practice. *International Journal of Teaching and Learning in higher education*, 21(2), 258-265.



The Impact of Covid-19 on Online Learning in Higher Education

-Ms. Sumitra Gahan¹ & Prof. Mumtaz Begum²

ABSTRACT

Due to COVID-19's rapid global growth, students were forced to switch from in-person to online instruction. Online learning during the Covid-19 pandemic refers to education delivered over the internet in response to widespread educational institution closures. Through video conferencing, students can access digital resources, live/recorded lectures, and interact with teachers and classmates. This approach has increased access to education globally and highlighted disparities in technology access and digital literacy. The world's learning landscape has changed and is still evolving continuously since the Covid-19 pandemic hit the globe. The education sector has significantly changed the duration of the Covid-19 pandemic. One such change which has occurred in the higher education system is learning in online mode. Many scholars and faculties used the online made to conduct classes, workshops, seminars, webinars, PhD viva-voce etc. This paper will focus on the positive and negative impact of online learning in higher education around the globe during Covid-19.

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Keywords: Covid-19, Online Learning, Higher Education

Introduction

We cannot return to the world as before. Still, we should consider ways that the right to education might need to be broadened to encompass fluidity, capillarity and the changing contexts of contemporary societies. Sahle-Work Zewde, Chairman of the International Commission on the Future of Education, UN, 2019(Stankovska et al., 2022)

The Covid -19 pandemic has had a profound impact on higher education. The sudden shift to online learning has challenged universities and colleges to quickly adapt to a new mode of instruction, leading to significant changes in the way students learn, institutions learn, and the way institutions operate. One significant impact has been on student learning experiences, with many students reporting reduced engagement and difficulties with online coursework. The pandemic has also highlighted existing inequalities in the higher education system, with disadvantaged students facing more significant challenges in accessing and completing their studies. Another impact has been on the financial stability of higher education institutions, which have experienced significant declines in revenue due to decreased enrolment and state funding. Additionally, international students, a significant source of income for many institutions, have faced uncertainty and reduced enrolment due to travel restrictions and visa issues. Overall, the covid-19 pandemic has accelerated the trend towards online education. Still, it has also exposed the need for better infrastructure, technology, and support to ensure that all students have access to high-quality education.

Review of Related Literature

Satnkovska. G., Memedi. I & Grancarovska, S.P. (2022) did a work on 'Impact of Covid -19 on Higher education: Challenges & opportunities' aimed to determine how medical students felt about the existing instruction system. This was a survey method & data collected from 220 medical students at the University

in Tetova. The results showed that most students were happy with the covid-19 outbreak. Alsayed, R.A & Althagafi, A.S (2022) in their research "online learning during the covid-19 pandemic: benefits & challenges for EFL students" comparing between online learning & offline learning and to explain the advantages & disadvantages of online learning at Saudi University, Saudi Arabia. Data were collected by survey method. This article concludes that traditional teaching is still more important than online teaching. Jean, Dr. P.K. (2020) in his work 'online learning during lockdown period for covid-19 in India' to discuss the positive and negative effects of online learning during corona period. This is a review-based paper. Mukhtar. K & Javed. K & Arooj. M & Sethi. A (2020) in their research work 'Advantages, limitation & recommendations for online learning during Covid -19 pandemic era' showed how online learning knowledge benefits teachers and students. The investigator collected data from 12 teachers & 12 students by using the case study method. Lastly, this article concludes positive reaction towards online learning.

Positive Impact

Online education can offer many positive impacts to students, including:

- Flexibility: online education allows students to access course material and attend classes from anywhere with an internet connection, allowing for more flexibility in scheduling and studying.
- **2.** *Convenience:* Online Education eliminates the need for commuting to a physical location, saving time and resources.
- **3.** Accessibility: Online Education can make education more accessible for students who have disabilities and live in remote areas.
- **4.** *Customisation:* Online Education often provides students with a broader range of course options and the ability to learn at their own pace.

- Cost-Effective: Online Education can often be more cost effective than traditional in-person education, as it eliminates expenses such as transportation and oncampus housing.
- 6. Technology-Enhanced Learning: Online Education often employs technology such as video, simulations, and interactive learning tools to enhance the learning experience.
- 7. *Networking opportunities:* online education allows students to network and collaborate with classmates from diverse backgrounds and locations.

Negative Impact

- 1. *Technical issues:* online classes often suffer from technical problems like poor internet connection, faulty equipment, and software compatibility issues that hinder the learning experience.
- **2.** *Isolation:* online classes can lead to isolation and loneliness, as students cannot interact face-to-face with their peers or instructors.
- **3.** *Lack of motivation:* with a physical classroom environment, students may be able to say motivated and engaged in their studies, leading to lower grades and decreased academic performance.
- **4.** *Time management challenges:* online classes often require students to manage their time effectively, as they are responsible for keeping up with coursework and meeting deadlines independently.
- 5. *Accessibility:* online classes may not be accessible to everyone, especially students with disabilities who may require accommodations to parties in a virtual classroom environment.
- 6. Quality of education: the quality of education in online classes can vary widely, as not all instructors are wellversed in teaching in a virtual setting and may struggle to engage students effectively.

7. Increased distractions: the lack of structure and accountability in online classes can lead to distractions, such as checking social media, watching TV, or other non-study activities during class.

Conclusion

Our situation is so dramatic and challenging that we cannot afford to be pessimistic. We are facing the most significant educational changes. One positive outcome of the pandemic is that it will push us to overcome the numerous global academic challenges sooner thanwe expected. The online live classes assumed the role of a "live guide" to motivate students in their learning process and rendered psychological support duringstressful hours of stringent restrictions. Technology is pivotal in upgrading educational processes and outcomes while defining the relationship between technology and education as bidirectional. (Stankovska et al., 2022) Online learning can increase access to education and reach a wider audience, especially for those who face geographical, financial or other barriers to traditional in-person learning. Online learning can offer flexible scheduling and self-paced learning opportunities, accommodating various student needs and schedules. The quality of online education can be just as good as in-person education, provided that the instructional design and technology are effectively used.

Recommendations

- Ensure that online courses are designed with an effective pedagogical approach, incorporating interactive and engaging elements.
- Provide adequate support and resources to students, including access to instructors, tutors and other support staff.
- Regularly assess and evaluate online courses and evaluate online courses to improve their quality and effectiveness continuously.

- Encourage student collaboration and interaction to foster community and enhance the learning experience.
- Provide training and professional development opportunities for instructors to teach online effectively.

REFERENCES

- Alsayed, R. A. & Althaqafi, A. S. A. (2022). Online Learning During the COVID-19 Pandemic: Benefits and Challenges for EFL Students. *International Education Studies*, 15(3), 122. https://doi.org/10.5539/ies.v15n3p122
- Hamid, R., Sentryo, I. & Hasan, S. (2020). Online learning and its problems in the Covid-19 emergency period. *Journal Prima Edukasia*, 8(1), 86-95. https://doi.org/10.21831/jpe.v8i1. 32165
- Jena, P. K. (2020). Online Learning During Lockdown Period For Covid-19 In India. *International Journal of Multidisciplinary Educational Research*, 9(5), 82-92. https://doi.org/10.31235/ osf.io/qu38b
- Mukhtar, K., Javed, K., Arooj, M. & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during the COVID-19 pandemic era. *Pakistan Journal of Medical Sciences*, 36, 27-31. https://doi.org/10.12669/pjms.36. COVID19-S4.2785
- Stankovska, G., Memedi, I. & Pandilovska, S. (2022). Impact of COVID-19 on Higher Education: Challenges and Opportunities. *Bulgarian Comparative Education Society* (*BCES*,) 20, 181-188. Retrieved from https://files.eric.ed.gov/fulltext/ED622717.pdf
- https://timesofindia.indiatimes.com/readersblog/indian-society-in-modern-era/online-teaching-during-covid-19-for-students-36255/
- https://elearningindustry.com/advantages-and-disadvantages-online-learning

उच्च शिक्षा में विशेष आवश्यकता वाले छात्रों के नामांकन से सम्बंधित आँकड़ों का अध्ययन

-Mr. Rajan Patel¹ & Dr. Rajeshwari Garg²

सारांश

भारत एक प्रजातांत्रिक एवं लोक कल्याणकारी देश है। किसी भी राष्ट्र का विकास उसके नागरिकों के विकास पर निर्भर करता है। भारत केसभी नागरिकों जिसमें दिव्यांगजनों का विकास होना अतिमहत्वपूर्ण है क्योंकि राष्ट्र के विकास में सभी वर्गों की तरह उनकी भी एक सजग नागरिक के रूप में महत्वपूर्ण भूमिका रही है, चूँकि भारतीय संविधान सभी नागरिकों को गरिमापूर्ण जीवन जीने का अधिकार प्रदान करता है, इसलिए उच्च शिक्षा प्राप्त करने का सभी को समान अधिकार है। प्रायः यह देखा गया है कि उच्च शिक्षा रोजगार एवं आत्मिनर्भरता की संभावना को बढ़ाती है। 2011 की जनगणना के अनुसार, भारत की 121 करोड़ जनसंख्या में से लगभग 2.68 करोड़ व्यक्ति ' दिव्यांग ' हैं जो कुल जनसंख्या का 2.21% है, लेकिन ऐसा देखा गया है कि इनमें से बहुत ही कम लोग उच्च शिक्षा तक पहुंच

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पाते हैं। 2011 की जनगणना के अनुसार, 5–19 वर्ष की आयु के दिव्यांग बच्चों में से 61% शैक्षणिक संस्थान में भाग ले रहे हैं, 12% प्रारंभिक अवस्था में शैक्षणिक संस्थानों में जाते हैं जबकि 27% कभी भी किसी भी शैक्षणिक संस्थानों में नहीं गए।। ISHE 2020–21 के रिपोर्ट के अनुसार, 2019-20 के अपेक्षाकृत वर्ष 2020-21 में छात्रों के नामांकन में कमी आई है यह कमी विशेष रूप से दिव्यांग महिला छात्राओं में देखने को मिली है। वर्ष 2019–20 में दिव्यांग छात्राओं की नामांकन संख्या 45001 थी जबकि 2020-21 में दिव्यांग छात्राओं की नामांकन की संख्या 29701 होगई है।इस उद्देश्य को ध्यान में रखते हुए अध्ययनकर्ता ने उच्च शिक्षा में विशेष आवश्यकता वाले छात्रों के नामांकन से सम्बंधित आँकड़ों का अध्ययन किया है जो विभिन्न दस्तावेज, पत्र– पत्रिकाएँ, जर्नल्स एवं संबंधित साहित्य का पुनरावलोकन आदि के अध्ययन के पश्चात यह पाया गया कि पिछले कुछ दशकों से उच्च शिक्षा में दिव्यांग छात्रों की नामांकन में बढ़ोतरी आयी है। यह बढोतरी भारत सरकार द्वारा बनाई गई नीतियों, कार्यक्रमों, बाधा मुक्त वातावरण, भौतिक संरचना, परिवहन सुविधा, उचित आवास, उपकरण, सभी के साथ समान मनोरंजनात्मक गतिविधियों व खेलकूद के लिए अवसर और समान शिक्षा प्रदान, सुगम्य सुविधाएं, बिना भेदभाव के पंजीकरण, पूर्ण समावेशन, पूर्ण भागीदारी तथा सभी को शैक्षिक व सामाजिक विकास के लिए सहायता प्रदान करना आदि कापरिणामहै।

कुंजी शब्द : उच्च शिक्षा, विशेष आवश्यकता वाले छात्र (दिव्यांगजन), नामांकन, समावेशन

प्रस्तावना

किसी भी राष्ट्र का विकास उसके नागरिकों के विकास पर निर्भर करता है। राष्ट्र के विकास में प्रत्येक नागरिक का योगदान होता है। यहां तक कि दिव्यांग व्यक्तियों के योगदान को नजरअंदाज नहीं किया जा सकता है। उच्च शिक्षा न केवल रोजगार सुनिश्चित करती है बल्कि आलोचनात्मक विश्लेषण एवं गहन रूप से सोचने — समझनेकी क्षमता भी विकसित करती है। चूँिक राष्ट्र के विकास में प्रत्येक व्यक्ति का योगदान महत्वपूर्ण है, अतः सभी को उच्च शिक्षा के अवसर भी समान रूप से प्राप्त करने का अधिकार

है, विशेष रूप से दिव्यांगजन को, ताकि वे भी आत्मिनर्भर, कौशल युक्त एवं जागरूक नागरिक बन सकें एवं देश के आर्थिक विकास में भी अपना योगदान दे सके। दिव्यांगजन अधिकार अधिनियम (RPWD Act) —2016 के अनुसार, भारत में कुल 21 प्रकार की दिव्यांगता की चर्चा की गई है, जो किसी न किसी प्रकार से दिव्यांगजनों को समावेशन में पूर्ण एवं प्रभावी रूप से भागीदारी में बाधा उत्पन्न करती है (पांडे, 2021)।

भारत सरकार ने देश के उच्च शिक्षा संस्थानों में दिव्यांगजनों के लिए 3% आरक्षण का प्रावधान किया गया था जो कि वर्तमान समय में 4–5% आरक्षण का प्रावधान है। अखिल भारतीय सर्वेक्षण–2014 के अनुसार, आई. आई.टी. और आई.आई.एम. सहित उच्च शिक्षण संस्थानों में 1521438 नामांकन छात्रों में से केवल 8449 छात्र दिव्यांगजन हैं। जो कि कुल छात्रों का सिर्फ 0.5% है जबकि यह आंकड़े पिछले वर्षों की तुलना में कम थे।

इसी संदर्भ में पर्सन विद डिसेबिलिटी—1995 में भी उच्च शिक्षा संस्थानों में दिव्यांगजनों के नामांकन के लिए 4—5% आरक्षण का प्रावधान है। इस अधिनियम के तहत भारत सरकार दिव्यांग छात्रों के उच्च शिक्षा में नामांकन संख्या बढ़ाने के लिए दिव्यांगता केंद्र, विश्वविद्यालयों, कॉलेजों व व्यवसायिक संस्थानों को वित्तीय सहायता प्रदान करने के लिए प्रतिबद्ध है। जिससे कि दिव्यांगजनों में रोजगार के संवर्धन एवं आत्मिनर्भरता का विकास हो सके और वे मुख्यधारा में शामिल हो सके। वर्ष 2011 की जनगणना के अनुसार यह आँकड़े प्राप्त होतेहैं कि भारत में कुल 2.68 करोड़ दिव्यांगजन है, जिसमें से 1.4 करोड़ दिव्यांग 15 से 59 आयु वाले रोजगार के योग्य हैं, जबकि अन्य आँकड़े अप्राप्त है (पायोनियर, 2015)।

स्वतंत्र भारत के पश्चात उच्च शिक्षा में दिव्यांगजन छात्रों के नामांकन में उतरोत्तर वृद्धि हुई है। देखा जाए तो हाल के वर्षों में विशेष रूप से निजी क्षेत्र के तकनीकी संस्थानों में विस्तार हुआ है। 12वीं योजना के उच्च शिक्षा के तीन आधार स्तंभ के रूप में पहुंच, समानता एवं उत्कृष्टता पर बल दिया है। जिसके फलस्वरूप उच्च शिक्षा संस्थानों में सफल नामांकन अनुपात वर्ष 2000 में 10% से बढ़कर वर्ष 2012—13 में लगभग 18% हो गया जबिक 12वीं योजना का लक्ष्य 2017 तक जी.ई.आर. को 25% तक बढ़ाना था (मिश्रा एंड बाल, 2014)।

वर्ष 2011 की जनगणना के अनुसार भारत की कुल 121 करोड़ जनसंख्या में से लगभग 2.68 करोड़ व्यक्ति दिव्यांगजन है, जो कुल जनसंख्या का 2.21% है (20 से 39 आयु वर्ग के दिव्यांगजनों में 22% गामक क्षमता, 18% श्रवण क्षमता, 8% वाणी दोष, 15% दृष्टिबाधित एवं 6% बहु—दिव्यांगता है)। वर्ष 2011 की जनगणना के अनुसार कुल दिव्यांगजन आबादी का लगभग 55% (1.46 करोड़) साक्षर है, 45% अशिक्षित या निरक्षर हैं तथा 5% उच्च शिक्षा प्राप्त हैं।

यहां पर यह सोचने वाली बात है कि 'सर्व शिक्षा अभियान' एवं 'शिक्षा का समान अधिकार' होने के बावजूद भी 45% दिव्यांगजन शिक्षण संस्थानों में क्यों नहीं गए, जबिक हम विशेष रूप से उच्च शिक्षा में दिव्यांग छात्रों के नामांकन को देखें तो साक्षरता के अनुसार बहुत कम है।

ऑल इंडिया सर्वे ऑन हायर एजुकेशन (AISHE)—वर्ष 2020—21 की रिपोर्ट के अनुसार उच्च शिक्षा में दिव्यांगजन छात्रों का कुल नामांकन (वर्षवार)

वर्ष	कुल नामांकन	पुरुष नामांकन	महिला नामांकन
2020-21	79035	49334	29700
2019-20	92831	47830	45001
2018-19	85877	48212	35665
2017—18	74317	42630	31687
2016-17	70967	40894	30073

अतः तुलनात्मक विश्लेषण के उपरांत यह पाया गया कि पिछले 5 वर्षों में उच्च शिक्षा में दिव्यांगजन छात्रों के नामांकन में बढ़ोतरी तो हुई है, लेकिन कुछ कारणों की वजह से (कोविड—19, गरीबी, महंगाई आदि) वर्ष 2020—21 में महिला दिव्यांग छात्रों के उच्च शिक्षा संस्थानों में नामांकन में कमी भी आयी है।

उच्च शिक्षा में दिव्यांगजन छात्रों के नामांकन एवं समावेशन में बाधाएं

अध्ययनकर्ता ने पाया कि उच्च शिक्षा में दिव्यांग छात्रों के नामांकन में निम्नलिखित बाधाएं एवं कारण है:—

- दिव्यांगता स्तर का सही मापन / जाँच का न होना:— दिव्यांग लोगों का सही जांच एवं मापन सबसे महत्वपूर्ण होता है। अगर दिव्यांग छात्रों का कठिनाई स्तर का सही तरीके से मापन या जांच न हो पाए तो उनमें विभिन्न प्रकार की त्रुटि बनी रहती है जिससे कि उच्च शिक्षा में कई प्रकार की कठिनाइयों का सामना करना पड़ता है, जिसके फलस्वरूप उच्च शिक्षा संस्थानों में नामांकन में कमी होती जा रही है। यह नामांकन कमी विशेष रूप से महिला दिव्यांग छात्रों में आयी है।
- सरकारी योजनाओं एवं कार्यक्रमों की अज्ञानता:— उच्च शिक्षा में दिव्यांग छात्रों की सबसे बड़ी समस्या यह है कि भारत सरकार द्वारा संचालित योजनाओं एवं सरकारी कार्यक्रमों की जानकारी न होना। वर्ष 2011 की जनगणना के अनुसार 1.46 करोड़ दिव्यांगजन साक्षर है जबिक वे भी पूर्ण रूप से सरकारी योजनाओं, कार्यक्रमों, सुविधाओं एवं अपने अधिकारों के प्रति जागरूक नहीं हैं।
- सामाजिक रूढ़िवादी धारणाएं:— समाज का मानना है कि दिव्यांगजन उच्च शिक्षा प्राप्त करके क्या करेंगे?वह कितना भी शिक्षित हो जाए उनको रोजगार में भी विभिन्न प्रकार की समस्याओं का सामना करना ही पड़ेगा। आज भी समाज की रूढ़िवादी धारणाओं के कारण दिव्यांगजनों के प्रति उनका बहुत ही संकुचित एवं नकारात्मक नजिरया बना हुआ है। उन्हें समाज पर बोझ समझा जाता है तथा उन्हें आत्मिनर्भर बनाने एवं उच्च शिक्षा प्रदान करने के बारे में नहीं सोचा जाता है। इन्हीं रूढ़िवादी धारणाओं के फलस्वरूप दिव्यांगजन उच्च शिक्षा में पढ़ाई छोड़ देते हैं और इसका प्रभाव ज्यादातर महिला दिव्यांग छात्रों पर देखने को मिलरहा है।
- भौतिक संरचना:—भौतिक संरचना दिव्यांगजन के लिए बहुत ही महत्वपूर्ण है। एन.सी.पी.ई.डी.पी. के अनुसार, उच्च शिक्षण संस्थानों में 1% से भी कम भौतिक संरचनाएं दिव्यांगता के अनुकूल उपलब्ध है। AISHE— वर्ष 2021 के अनुसार अधिकतर उच्च

उच्च शिक्षा में विशेष आवश्यकता वाले छात्रों के नामांकन .

शिक्षण संस्थानों में दिव्यांगता के अनुसार भौतिक संरचना, शौचालय, कुर्सी, क्लासरूम, रैम्प आदि उपलब्ध नहीं है जिसके परिणामस्वरूप दिव्यांग छात्रों के नामांकन में कमी आ रही है।

- दृष्टिकोण या अभिवृत्ति से संबंधित मुद्देः— समावेशन की सबसे बड़ी बाधा नकारात्मक अभिवृति, नजिरया या दृष्टिकोण है। अक्सर यह देखा जाता है कि दिव्यांग छात्रों के साथ उनके साथी या मित्रों द्वारा बुलिंग करना, चिढ़ाना एवं बहिष्कृत किया जाता है। यहां तक कि दिव्यांगजनों के प्रति शिक्षकों का भीरवैया नकारात्मक पाया गया है जो दिव्यांग छात्रों के उच्च शिक्षा में बाधा का कारण बना है जिसकी वजह से वह उच्च शिक्षा में पढ़ाई छोड़ रहे हैं (यादव, 2015)। प्रभावती, 2016 ने अपने अध्ययन में पाया कि प्रभावी समावेशन उच्च शिक्षा को बढ़ावा देने के लिए जागरूकता, सकारात्मक सोच का विकास एवं प्रशिक्षण कार्यक्रमों का संचालन आदि की आवश्यकता है जिससे कि उच्च शिक्षा में भी दिव्यांगजनों की भागीदारी को बढ़ाया जा सके।
- उच्च शिक्षा में दिव्यांग छात्रों को बढ़ावा देने के लिए सबसे महत्त्वपूर्ण है कि उनका शैक्षिक मार्गदर्शन किया जाए।
- परीक्षा एवं मूल्यांकन:— उच्च शिक्षा कॉलेजों में दिव्यांगता के अनुसार परीक्षा एवं उनके मूल्यांकन का आयोजन किया जाना चाहिए। ऐसा देखा गया है कि एक क्लासक्तम के अंतर्गत विभिन्न प्रकार के छात्र अध्ययन करते हैं लेकिन औसत छात्रों को ध्यान में रखकर परीक्षा प्रणाली एवं मूल्यांकन प्रक्रिया अपनायी जाती है जो दिव्यांग छात्रों के विकास के लिए बाधा का कार्य करती है। जिसके वजह से उच्च शिक्षा में विशेष आवश्यकता वाले छात्रों के नामांकन में कमी आयी है।
- पाठचचर्याः उच्च शिक्षा संस्थानों में अधिकांश शिक्षण विधियां व्याख्यान पद्धित पर आधारित है। जबिक व्यक्तिगत विभिन्नता एवं व्यक्ति की विशेष आवश्यकताओं को ध्यान में रखते हुए पाठचचर्या अलग—अलग होनी चाहिए। किन्तु वास्तविक रूप से ऐसा नहीं होता है यहां पर समान बच्चों को ध्यान में रखकर पाठचक्रम और

पाठचचर्या का निर्माण किया जाता है यह भी उच्च शिक्षा में दिव्यांग छात्रों के नामांकन में कमी का एक कारण हो सकता है।

- सहायता केंद्र:— यह बहुत ही आवश्यक है कि उच्च शिक्षण संस्थानों में अलग—अलग सहायता केंद्र होने चाहिए जिससे कि शुरुआती समय में जो छात्र तनाव और समस्या से प्रभावित होते हैंवे पढ़ाई छोड़ देते हैं, इस समस्या का समाधान किया जा सके। इसलिए उच्च शिक्षा में दिव्यांग छात्रों के नामांकन में कमी का यह भी एक कारण हो सकता है कि प्रत्येक उच्च शिक्षण संस्थानों में सहायता केंद्र का न होना।
- रोजगार की समस्या:— वर्तमान समय में रोजगार की समस्या एक बड़ी समस्या है। यह कोई जरूरी नहीं होता कि उच्च शिक्षण संस्थान में शिक्षा प्राप्त करने वाले दिव्यांग छात्रों को रोजगार मिल ही जाए इस कारण वह अपनी आजीविका चलाने के लिए अन्य किसी काम के बारे में सोचने लगते है। बहुत कमदिव्यांग छात्र ही इन बाधाओं से लड़कर उच्च शिक्षा प्राप्त कर पाते हैं (मुरलीधरन 2013)।

वर्ष 2011 की जनगणना के अनुसार कुल दिव्यांगजनों में से लगभग एक तिहाई काम कर रहे हैं और दो तिहाई दिव्यांगजन किसी भी रोजगार में नहीं है या काम नहीं कर रहे हैं। स्कूली शिक्षा प्राप्त करने के पश्चात ही दिव्यांगजन व्यवसायिक प्रशिक्षण की ओर अग्रसर होने लगते हैं जिससे उन्हें किसी—न—किसी प्रकार की नौकरी या काम मिल जाए। यह भी एक कारण हो सकता है कि दिव्यांग छात्र उच्च शिक्षा प्राप्त नहीं कर पाते हैं।

सुझाव

- दिव्यांगता के सही एवं अधिक विस्तृत मापन एवं जाँच की आवश्यकता है।
- सरकारी कार्यक्रमों एवं राष्ट्रीय नीतियों का प्रभावशाली रूप से क्रियान्वयन होना चाहिए जिससे दिव्यांगजन अधिक से अधिक मिलने वाली सुविधाओं और अपने अधिकारों को जान सकें।

- ज्यादातर दिव्यांगजन गांव में निवास करते हैं उनके लिए विभिन्न प्रकार के जागरूकता अभियान संचालित किया जाना चाहिए जिससे कि सामाजिक रुढ़िवादी धारणा को खत्म किया जा सके।
- भारत सरकार की पहली प्राथमिकता होनी चाहिए कि सभी उच्च शिक्षण संस्थानों में यथाशीघ्र दिव्यांगजनों के अनुकूल भवनों का निर्माण किया जाए।
- उच्च शिक्षण संस्थानों में भी इंटरएक्टिव शिक्षण पद्धित एवं आवश्यकता को देखते हुए शिक्षण विधियों का उपयोग किया जाना चाहिए अर्थात अलग—अलग शिक्षण विधियों को प्रयोग में लाया जाना चाहिए।
- विशेष रूप से दिव्यांगजन छात्रों के उच्च शिक्षण संस्थानों में किसी भी प्रकार का भाषागत बाधाएं उत्पन्न नहीं होनी चाहिए ।
- दिव्यांगता से संबंधित जानकारी के अभाव के कारण दिव्यांग छात्रों को विभिन्न समस्याओं का सामना करना पड़ता है ऐसे कई राष्ट्रीय पोर्टल हैं, जिन पर ओरियंटेशन कार्यक्रम करके चर्चा किया जा सकता है जो दिव्यांगजन छात्रों के लिए उपयोगी हो सकता है।
- समानता का अवसर पूर्णरूप से प्राप्त होना चाहिए और वह व्यावहारिक रूप से दिखना चाहिए।
- सह—पाठचगामी गतिविधियों के साथ—साथ दिव्यांग छात्रों की समान भागीदारी सुनिश्चित की जानी चाहिए।

निष्कर्ष

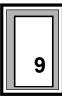
उपरोक्त आँकड़ों के विश्लेषणात्मक अध्ययन के पश्चात पाया गया कि पिछले कुछ दशकों से उच्च शिक्षा में विशेष आवश्यकता वाले छात्रों (दिव्यांगजन) की नामांकन संख्या में निरंतर वृद्धि हुई है। यह वृद्धि भारत सरकार द्वारा बनाई गई नीतियों, कार्यक्रमों, बाधा मुक्त वातावरण, भौतिक संरचना, उचित आवास, उपकरण, जागरूकता अभियान, शिक्षा में समान अवसर, बिना भेदभाव के पंजीकरण, पूर्ण समावेशन, पूर्ण भागीदारी तथा

सभी को शैक्षिक व सामाजिक विकास के लिए सहायता प्रदान करना आदि का परिणाम है। हालांकि सकारात्मक रवैए के बावजूद उच्च शिक्षा तक उनके सापेक्षित पहुंच के मामले में दिव्यांगजनों के बीच विषमता है। अतः इन विषमताओं को अभी भी कम करने की आवश्यकता है जिसके लिए भारत की सभी शिक्षा प्रणाली जैसे—प्राथमिक, माध्यमिक, व्यवसायिक और उच्च शिक्षा में गुणात्मक सुधार की आवश्यकता है। छम्च— 2020 इस दिशा में महत्वपूर्ण कदम उठाया गया है जिससे दिव्यांगजनों का समाज में रोजगारपरक एवं आत्मनिर्भरता का विकास हो सके क्योंकि एक सफल नागरिक ही देश के विकास में योगदान दे सकता है।

सन्दर्भ सूची

- AISHE(2021).Retrieved from https://aishe.gov.in/aishe/BlankDCF/AISHE%20Final%20Report%202020-21.pdf NCPEDP (2019).
- गैप इन डी एन इ पी विस—ए विस प्यूपिल विथ डिसेबिलिटीज एंड करेस्पॉन्डिंग इनपुट. नेशनल सेंटर फॉर प्रमोशन आफ एंप्लॉयमेंट ऑफ डिसेबल्ड प्यूपिल (NCPEDP) एंड नेशनल डिसेबिलिटी नेटवर्क.
 - Retrieved from:https://ncpedp.org/documents/Inputs% 20on%20The %20Draft%20 National%20 Education% 20Policy%202019.pdf
- आर. पी. डब्लू. डी. (2016). द राइट आफ पर्सन्स विद डिसेबिलिटीज एक्ट, 2016. मिनिस्ट्री ऑफ़ लॉ एंड जस्टिस, गवर्नमेंट ऑफ़ इंडिया Retrieved from http://www.upfcindia.com/documents/ rpwd_101017.pdf
- जेफ्फेरी, आर.—सिंगल, एन. (2008). मिजरिंग डिसेबिलिटी इन इंडिया. इकोनामिक एंड पॉलीटिकल वीकली, 22—24.
- पाण्डेय, ए. (2021). रोडब्लाक ऑन द वे ऑफ डिसेबल्ड स्टूडेंट्स इन हायर एजुकेशन. इश्यूज एंड आइडियाज इन एजुकेशन, 4(1), 67–77.
- पायनियर, टी. (2023). फॉल इनएनरोलमेंट ऑफ डिफरेंनटली— अबल्ड इन हायर एजुकेशन
- Retrieved fromhttps://www.dailypioneer.com/2015/india/fall-in-enrolment-of-differently-abled-in-higher-education.html

- प्राबित, एम. (2016). अवारनेस एंड एटीट्यूड आफ फैकल्टी मेंबर्स टुवर्ड्स इंक्लूजन आफ स्टूडेंट्स विद डिसेबिलिटीज इन हायर एजुकेशन. इंपिरियल जनरल ऑफ इंटरडिसीप्लिनरी रिसर्च, 2(9), 749–755.
- मंजूर, बी. (2022). एजुकेशन एंड डिसेबिलिटीः ए स्टडी ऑन एसेस टू हायर एजुकेशन फॉर स्टूडेंट्स विद डिसेबिलिटी इन जम्मू एंड कश्मीर. पृष्ट संख्या—32.
- मिश्रा, एस. एन.—बाल, एम. (2014). एक्सीलेंस थ्रू इक्विटीः चैलेंजेस बिफोर हायर एजुकेशन इन इंडिया. इंटरनेशनल जनरल ऑफ एजुकेशनल प्लैनिंग एंड एडिमिनिस्ट्रेशन, .
- मुरलीधरन (2019). एसेस डिनाइड. द इंडियन एक्सप्रेस-
- Retrieved from: https://indianexpress.com/article/opinion/columns/india-national-educationpolicy-unesco-children with-disabilities-right-toeducation-5861820/
- मेहरोत्रा, एन. (2004). वूमेन, डिसेबिलिटी एंड सोशल सपोर्ट इन रूरल हरियाणा. इकोनामिक एंड पॉलीटिकल वीकली, 5640—5644.
- यादव, के.के. (2015). ए स्टडी ऑफ़ बुलींग ऑफ़ चिल्ड्रेन विथ स्पेशल नीड्स इन मेनस्ट्रीम स्चूल्स. अप्रकाशित लघुशोध.
- लक्ष्मण, सी.एम.—मारुथि, आई. (2018). द डिसेबल्ड पापुलेशन एंड हायर एजुकेशनल स्टेटस इन इंडिया. पेरीफेरिया,10(2), 135—157.



Education for Sustainable Development in NEP-2020 Perspective

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ABSTRACT

The sustainable development goal prescribed by the United Nations is based on the contemporary and future needs of education and other driving needs for the development of nations and survival in a better world. The SDG has recommended 17 goals that promote the activist and artistic members of society. The National Education Policy has included SDGs on quality education and given an open call that aligns with the key aspects of access, equity, quality, affordability, and accountability in education. Implementing NEP by fulfilling the SDG-4 goal must ensure inclusive and equitable quality education and promotes lifelong learning for all. As we know education has always been part of great change agents all over the world. Whatever happens inside the classroom is reflected in society?

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Any path of innovation, intervention, and development cannot make a significant change without the fruit of education. The UN has already declared the decade of 2020-2030 as the decade for action. Though, it is also starting the era for resilience as the world is frightened by the Covid-19 outbreak situation. The Govt. of India has taken bold and transformative steps for the strategic implementation of NEP-2020 and also focuses on the aspirational goal of the 21st century's educational need by furnishing the sustainable development goal of quality education. In this context, a conceptual study was done. Thus this paper also includes many perspectives and recommendations on developing quality education in various institutions based on a holistic and multidisciplinary approach to education. This article can also be considered as a policy implementation of NEP-2020 with reference to the goal of sustainable development.

Keywords: Quality Education, Life-long Learning, NEP-2020, Sustainable Development Goals.

Introduction

The year 2020 considered as an exciting new beginning in the era of Indian Higher Education with the launch of the National Education Policy-2020. The National Education Policy (NEP-2020) is one of the remarkable landmarks in the history of the higher education system. It aims to make a way for nationwide revolutionary reforms in education sectors. The policy is built on the ground pillars of access, equity, quality, cost-effective, accountability, employment, and entrepreneurship that aligned with the agenda of 2030 for full filling the goals of sustainable development and transferring India into a vibrant knowledge economy on a global level. The global developmental agenda reflected in the sustainable development Goal (SDG-4) adopted by India in 2015 seeks to ensure inclusive and equitable fruit of quality education and promote continuing educational opportunities for all by 2030. The NEP-2020 committed to achieving the target of a 50 percent Gross Enrolment ratio in higher education by 2035 (GOI, 2020).

Sustainable Development Goal (4) and Its Relevance with New Education Policy (2020)

Quality education is the backbone for the growth of society and the nation's development. In India, after three decades the National Education Policy (NEP-2020) was introduced by the current Govt, of India to overhaul and transform the education system as per the educational need of the hour and the future demand of youth in the country. The United Nations Sustainable Development goal (4) highlighted an important mark on education that equal access to education is the base of sustainable development growth of any nation. The NEP-2020 trying the aliening the target of SDGs into education by ensuring the success of self-reliance and equal education campaign with a focus on technical skills and knowledge. The last NPE was introduced in 1986 and updated in 1992 (POA). Since then, no major changes had been made in the education policy of India. Keeping in the view of Millennium Development Goals (MDGs) (SDGs) the NEP-2020 focuses on the target that India will serve as a "global knowledge superpower" by providing quality education, encouraging innovations, and promoting a sound research environment in the educational institutions. The Envisions of SDG 2030 targets which ensure the following agenda are as follows:

- 1. The SDGs (4)- 2030 goal assure that all children belong from the age group of 6-14 must access free, equitable, and quality elementary level education with the desired learning outcomes.
- 2. The SDGs (4) -2030 ensure that all children will have an equal access of quality education from early childhood care to primary education.
- 3. The SDGs (4) -2030 focus on equal access for all women and men to affordable quality technical, professional, and further level of higher education by eliminating the gender disparities in education including the person with disabilities, indigenous peoples, and children belonging from vulnerable situations.

4. The SDGs (4) -2030 also ensure a maximum number of involvements in technical and vocational skills for better employment, decent jobs, and entrepreneurship.

Related Literature

Literature related to strategic implementation of NEP-2020 for the betterment of teacher education in India with policy perspectives. Strategic approach was collected and tabulated below.

Table-1: Studies Related to Ways of Sustainable Development into the Area of Education with Reference to NEP-2020.

	Author &	Study	
Area	Year	Area	Find ings
Realizing SDG4	Mittal &	Im pleme nting	Successful implementation of SDGs
goals in the	Pani	SDG4 goals	needs individual's awareness and
context of (NPE-	(2022)	through HEIs	entire organization with appropriate
2020)		(NPE-2020)	sustainability of skills, knowledge, and
			capacity to respond contemporary
			challenges of Society. In addition major
			reformation in curriculum pedagogy of
			HEIs is required around the globe to
			achieve global sustainability agenda
			2030.
University	P Kaliraj	In volvement of	
Engagem ent	et		education institutes both universities
towards	al.(2022)	Teaching,	and colleges are very much necessary
Enrichment of		Curriculum	in present the educational scenario.
Curricum &		and Research	However, SDG goals help to move
Research (NEP-			towards goal of access equitable,
2020)			objectivity and action oriented research
1	D	16 . 0 .	that enlarge
Attaining SDGs Goals	Rawat& Vij 2022)	Mapping Out the SDGs4 for	Recommended that attainment of SGGs into the higher education can extend
Goals	V1j 2022)	Higher	the collaboration with stakeholders of
		Educational	different developing and develop
		In stitutions	countries. Such type of collaboration
		III a reactions	can enrich teaching strategy,
			knowledge building, research work in a
			very practical and accurate manner as
			prescribed by SDGs4.
Recommendation	LK&	Demystifying	Identified that higher educational
towards NEP-	Vibha	SDGs through	institution can foster the learning
2020 and its	(2020)	Higher	process as following the SDGs by
interlinked with	·	Educational	advocating the innovative approaches
SDGs4		opportunities	that rigoursly strengthen the ranking of
			institution and enhance the technology
			oriented learning environment as
			recommended by NEP-2020.

(Contd...)

	Author &	Study	
Area	Year	Area	Find ings
An Critical	Sharma	Anappraisal	To implement NEP-2020 successfully at
Appraisal of	& Wamal	of Innovations,	all levels trained teachers required with
(NEP-2020)	(2021)	merit and	digital competencies for each stage of
	<u> </u>	Challenges	development. Teachers need to be
		(NEP-2020)	digitally trained to blend into the
			digital learning process.

Purpose of the study

National Education Policy is a significant landmark and a guiding source to bring informative and reliable changes in the entire structure of Indian education. The policy is a revolutionary step of Govt. of India that will bring transformational changes in the entire system through advancement in pedagogies, knowledge creation, innovative delivery mechanisms, and integrated management of the education system. This policy is framed to meet the contemporary and futuristic needs of the hour and youth large population of India. The policy also laid down the effective and flexible integrated approach for creating a vibrant knowledge society as per the 21st century's learners' needs. The NEP-2020 is also in line for achieving the goal of sustainable developments to quality education and its important visions for ensuring inclusive and equitable quality education. Furnishing the goal of SDGs into education can open the door to free and compulsory equitable primary and secondary education for all in a universalized manner. Hence, the current study would provide an impetus and contextual knowledge for the practical implication of SDG's goal in the whole system of education is quite relevant.

Methodology

This conceptual study is based on the Implementation strategies of sustainable development goals in the sphere of Education at national level and as a whole. The suggested strategic idea of NEP-2020 implementation is taken from the various journals and literature studies, Govt. policy framework, Govt. report related to this particular topic.

Objectives

- To identify the sustainable development goals of education with reference to NEP-2020 and its Implementation Strategies.
- 2. To explore the proposed road map for the Sustainable Attainment of Sustainable development goals 4 in the sphere of education.

Sustainable Development Goals (SDGs)

India has actively participated and responded in achieving the goals of sustainable development. The agenda brought the economic, environmental and technical dimensions of sustainability with social dimensions and affordability of access, equity and quality education. Globally, SDGs introduced 17 goals with 169 targets and 234 evaluation indicators.

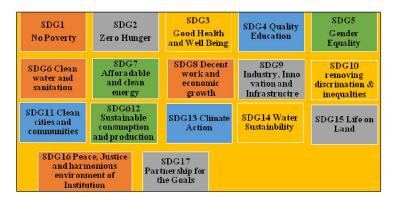


Figure-1: Sustainable Development Goals

Analysis of Objective-1: Implementation Strategies of National Education Policy (2020), with reference to Sustainable Development Goals-4

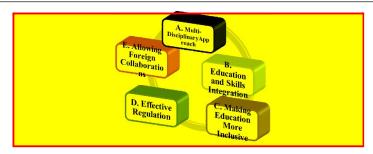


Figure-2:Implementation strategies of SDGs4

(A) Multi-Disciplinary Approach: The multidisciplinary approach is one of the fundamental initiatives advocated by NEP-2020. The multidisciplinary approach will guide the education system and individual institutions. The New Education Policy-2020 states that it is a holistic education across the sciences, social sciences, arts, humanities, and sports from an inter-disciplinary world that ensure unity and integrity in all the path of education (NEP-2020). The focus on making education multidisciplinary is a significant step taken by the Govt. of India through NEP that will benefit the students in a wide range of job opportunities and other sectors. The flexibility of choosing subjects from the different streams will give a wide range of exposure for learning without any restrictions which they faced earlier. Such kind of approach fosters intellectual curiosity, a critical thought process, selfreflection, leadership, and teamwork spirit towards the society and the socio-cultural environment. The cutting-edge curriculum, flexible options, interest, and educational investment was taken by the Govt. of India will go a long way in enhancing the quality standard of education, teaching tasks, etc. This revolutionary step must help to increase the retention and enrolment ratio of students and will increase the gross enrolment ratio of higher education from 26.3% in 2018 to 50% by 2035.

- (B) Education and Skills Integration: NEP-2020 has also focused on the aspects of vocational and technical knowledge with the provision to integrate it into a mainstream course. There will be internship and training classes for students to acquire various skills. It also introduces at least 10 days bag less period in school where students will get a chance to interact with vocational experts likecarpenters, gardeners, artists, and potters to provide hands-on experience on new developing skills. One of the major focuses of NEP-2020 to achieve the target of UNSDG on education is enhancing technological advancement at all levels of education. Technological advancement will lead to the professional development of teachers. SDG 2030 encourages the member of states to increase the supply of qualified teachers through national and international co-operations. NEP also advocates establishing National Educational Technology Forum (NETF) to promote technology use in the assessment, planning, and administration process.
- (C) Making Education More Inclusive: Based on the target of SDG-2030 the NEP-2020 major focus on five pillars; access, affordability, equity, quality, and accountability. It introduces a 5+3+3+4-year system as four pedagogical structures-1) foundational stage 2) Preparatory Stage 3) Middle Stage 4) secondary stage instead of a 10+2 system. The first two stages emphasize developing language and numeracy skills with the provision of learning three languages. The middle stage signifies more practical and critical learning rather than rote learning. The secondary stage focuses on multidisciplinary education by providing the leeway for the opting subject of their interest and removing the rigid separation of arts and science. The policy also launched a four-year integrated degree course in multiple ways. UNSDG 2030 also gives special attention to ensuring universal access to education for all and no

discrimination should be reflected in terms of gender, persons with disabilities, indigenous peoples, and people belonging to any caste, creed, and religion. NEP 2020 also includes a local language, three language formulas in creating the National Curriculum Framework, and providing a conducive learning atmosphere for the upliftment of disadvantaged groups such as disabled, girls, SC, ST, OBC, transgender children, and other economically weaker section of society. For the sustainable growth of education and fulfilling the universal goal of education for all, there will be a substantial investment in the education sector by investing 6% of GDP against the current 1.7% as per the report of NEP-2020.

(D) Effective Regulation: Effective regulation and administration is the important mechanism of higher education. The regulatory system of higher education solves the distinct functions like proper accreditation, funding, and a good academic setting that empowered the whole body in a very smooth manner. The effective regulation system is considered an essential part that eliminates discrimination, manages the conflict of interest among different governing bodies, and revises and reforms the entire system of education in a balanced way. To manage these aspects of any academic institution NEP-2020 has set up a fourstructural framework under the Higher Education Commission of India (HECI). The first measure of HECI is the establishment of the National Higher Education Regulatory Council (NHERC) for facilitating the higher education sector and teacher education. The second mechanism is based on the 'meta accreditation bodies' called the National Accreditation Council (NAC), the task function of this body is to provide the grade based on the quality parameters, good governance, and autonomy. The third primary focus is on the Higher Education Grant Council (HEGC) for managing the process of funding and financing based on the transparent criteria and relative progress made by the institution. The fourth road map is the General Education Council (GEC) which will manage the expected learning outcomes of higher education based on graduate attributes. These are the future road maps prepared by NEP-2020for the effective regulation and implementation of suggestive measures in a real form. Based on this it can be considered that the ultimate aim of education and NEP-2020 and SDGs-4 prescribed goals is fulfilling and sustaining the growth and fruit of education in every member of society beyond the barriers that exist in the society.

(E) Allowing Foreign Collaborations: India has one of the largest networks of the higher education system in the world including the 990 universities and 40,000 colleges. However, the Gross Enrolment Ratio (GER) is comparatively low as compared to many developing and developed countries. In the arena of higher education, NEP facilitates a new legislative framework with the establishment of foreign universities that will be given a special dispensation regarding effective regulation, governance, and content norms on par with other autonomous institutions. In essence, the SDGs-4 also suggested an important outlook for expanding the global collaboration with different states of foreign countries. Such kind of connection helps students to seek an educational degree by availing the Scholarship and fellowship facilities. This must be ensured a higher enrolment and retention in the higher education system including the vocational and ICT training, engineering, and scientific programs with job opportunities. According to SDGs, by 2030 there will be substantial growth in the supply of good qualified and trained teachers with increasing the global networks across the country. This global collaboration and globalization in the area of higher education will significantly contribute to the sustainable economic growth of the country and enrich the maximum number of knowledge resources.

Analysis of objective-2: Proposed Road Map for the Sustainable Attainment of SDGs4 in the Sphere of Education.

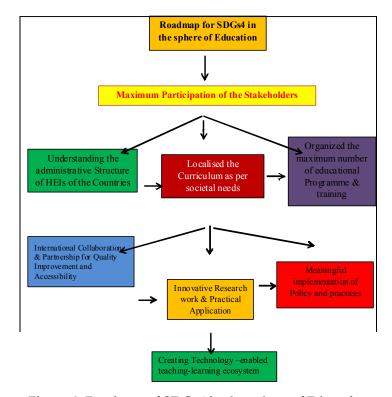


Figure-3: Roadmap of SDGs4 in the sphere of Education

The role of higher educational institution is very significant in bringing about relevant changes in the society and achieves the target of SDG4. For the sustainable attainment of these goals a coordinated, deliberate and collaborative efforts are requiring by all the stakeholders to aid policy and exercise control for its effective implementation. Further the targets of SDGs are very reflective for every citizen and stakeholders of the country to enabling the fruit of education among the future generation learners. The proposed roadmap of this model highlights the

essential dimension's need to be covered by any higher educational institution to attain sustainability. However, it's a high time for the educational system of India to observe, evaluate and create an excellent teaching-learning and research ecosystem for higher education in tune with the needs of contemporary society to respond as according to prevailing situation and upcoming challenges.

Conclusion

Based on the above dimensions of National Education Policy and aligning goal of sustainable development it can be said that there is a great lacking in the programming action of education and thrusting need of current and future generation's learners. In that sense, the mechanism of NEP-2020 and SDGs is in the right direction for providing equitable resources of education and different skill-oriented courses among the learners. The holistic and multidisciplinary approach to education is very well suited for 21st-century youth and learners. This may open a new path of education based on interdisciplinary subjects, selection, of course, vocational training, skill development, and many more. Pointing out the last 1986 education policy, the country now needed educational intervention aligned with the sustainable and aspirational goals of every citizen rooted in value system and ethos. Providing lifelong learning and job opportunities and making a productive member of society with a knowledge economy is the important target of SDGs-2030. Hence, the regulatory bodies and the prescribed measures of NEP will be working as an umbrella for the new era of education.

REFERENCES

- Kahlon, L. K. & Dhawan, V. (2022). Demystifying SDGs through Higher Educational opportunities. *University News*, 60(12), 23-26.
- Kaliraj, P., Lovelina, L.F, Ashitha, M. V. (2022). University Engagement through towards SDG4 through Teaching, Curriculum and Research. University News, 60(10), 15-24.

- New Education Policy (2020). Government of India.https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English.pdf
- of the United Nations Sustainable Development Goals (SDG 2030). Delhi Business Review, An International Journal of SHTR, 22(2). Retrieved from https://www.journalpressindia.com/delhi-business-review
- Pankaj, M. & Sistla R.D. (2022). Realizing the Sustainable Development Goals through Higher Education Institutions for Actualizing inclusive and Equitable Quality Education. *University News*, 60(10), 7-13.
- Ramana, M. & Ghosh, S. (2021). New Education Policy-2020 of India is in line with Goal
- Rawat, U. S. & Suman, V. (2022). Higher Education Institutions as Protagonist towards Sustainable Development Goals: Mapping Stratagems towards Feat. University News, 60(10), 20-30.
- Sunita K.S. & Jaspal, S.W. (2021). National Education Policy-2020: An appraisal of Innovations, merit and challenges. *University News*, 59 (12), 22-28.

Open and Distance Learning: Perspectives of Learners from Chhattisgarh

-Dr. Varsha Shashi Nath¹ & Ms. Preeti Sahu²

ABSTRACT

Rapid progresses in information and communications technology in the digital era have brought about significant changes in the practice of Open and Distance Learning (ODL) worldwide. The objective of this study was to investigate the perspectives of learners about Open and Distance Learning. The study was conducted at Pt. Sundarlal Sharma (Open) University (PSSOU) Campus. The study employed qualitative approach. The data was collected through online questionnaire (Google form). The questionnaire contains items from different dimensions such as advantages of ODL, disadvantages of ODL, challenges in ODL, etc. it has both open ended and closed ended items in it. Frequencies, and percentages were the main descriptive statistics used to analyze the data obtained and present the findings. The results showed that the most usually reported challenges of ODL learners are lack of sufficient time to study, difficulties in accessing and using ICT, etc. It was recommended by the learners that PSSOU

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should open up various other professional courses which may provide more opportunities to the learners to get the job.

Keywords: ODL, learners, challenges, perspectives.

Background of the Study

The Development Goals of the United Nations emphasizes on education for sustainable development. Education for sustainable development doesn't restrict any learner to study at any age, from anywhere, at any time and any content. This is the indication of importance of Open and Distance Learning (ODL) in all over the world (Kalaivani 2014) and especially in India. As India is a country of diversity hence to cater the needs of diverse learners ODL system must offer innovative methods and programs. Indira Gandhi National Open University (IGNOU) is the pioneer in ODL in India and one of the premier educational institutions not only in the country but also in the Indian subcontinent (Rashid and Rashid 2011).

Over the last few decades, there has been proliferation in the number of institutions that have implemented distance education for higher education. The teaching-learning method in distance education is less formal, diverse and flexible as compared to conventional campus based education. Due to its easy accessibility the recognition of ODL system is gaining a strong hold in India. In Chhattisgarh state Pt. Sundarlal Sharma (Open) University, Chhattisgarh is the only university providing opportunity to the learners to continue their education.

Rationale of the Study

Distance education was an approach under the umbrella of non-formal mode of education which contributed much in the extension of education. Distance education is going to become more widespread and accepted approach for education in the modern era. In recent years there has been such a greater demand for higher education which cannot be met without developing substitute strategies providing for time

adjustments. Looking into the importance of ODL in India it is necessary to view the perception of learners studying in ODL. Hence this study was conducted to know the perception of learners from Chhattisgarh state studying in PSSOU and their satisfaction level with the ODL.

Statement of the Problem

The Problem of the study is stated as - Open and Distance Learning: Perspectives of learners from Chhattisgarh

Objectives

To conduct the study, researchers had formulated following objectives-

- To study the perspectives of learners about Open and Distance Learning (ODL) in terms of a) Advantages of ODL b) Disadvantages of ODL
- 2. To study the perspectives of learners about satisfaction level regarding ODL.
- 3. To study the perspectives of learners about challenges in ODL.
- 4. To find out the suggestion of learners about the betterment of ODL.

Delimitation

The study was delimited to only Open University of Chhattisgarh state i.e. Pt. Sundarlal Sharma (Open) University, Chhattisgarh.

Methodology

Population: All the learners of Pt. Sundarlal Sharma (Open) University, Chhattisgarh who were enrolled in various programmes for the session 2022-23 were considered as population of the study.

Sample and sampling: 20 learners each from B.A programme, B. Lib programme, B.Sc. Programme, B.Ed.

programme and M.A. (Education) Programme were selected randomly as sample for the study.

Method: To analyse the collected data the researchers used frequency and percentage analysis techniques as descriptive survey method.

Tool used for collecting data: A self-made tool in Google form was used as tool to collect data from the samples. The tool consists of 23 items including both closed ended as well as open ended items in it. The dimensions of the tool were – advantages of ODL, disadvantages of ODL, challenges in ODL and satisfaction level of learners. The content validity of the tool was checked by the experts.

Analysis and Findings of the Study

Analysis of objective 1 (a): To study the perspectives of learners about Open and Distance Learning (ODL) in terms of-Advantages of ODL

Table 1: Responses of Learners on Advantages of ODL

Advantages of ODL	Agree		Neutral		Disagree	
	F	%	F	%	F	%
I can learn at my own pace	69	69	5	5	26	26
I can learn from any location	78	78	9	9	13	13
I can learn with my learning style	65	65	6	6	29	29
It is less expensive / It reduces extra financial burden like transportation cost, buying books, etc.	73	73	11	11	16	16
I can self-learn with the help of SLMs, e-SLMs, audio lectures and video lectures	83	83	9	9	8	8

Source: Responses of learners

It is shown in the table 1 that 69% of learners were agreed that they can learn at their own pace in ODL and 78% of learners replied that they can learn from any location (Almahasees, Mohsen & Amin 2021). Around 65% of learners stated that they can learn with their learning style as they have the facility to

learn from audio, video, SLM, e-SLM, etc. (Arinto, 2016). About 73% of learners responded that ODL is less expensive from conventional education as it reduces extra financial burden like transportation cost, buying books, etc. (Al Rawashdeh, et.al. 2021). 83% of learners accepted that they can self-learn with the help of SLMs, e-SLMs, audio lectures and video lectures.

Analysis of objective **1** (*b*): To study the perspectives of learners about Open and Distance Learning (ODL) in terms of Disdvantages of ODL

Table 2: Responses of Learners on Disdvantages of ODL

	Agree		Neutral		Disagree	
Disadvantages of ODL	F	%	F	%	F	%
Studying in open and distance mode makes me feel isolated	69	69	12	12	19	19
No scope for enjoying campus life	59	59	9	9	32	32
Looking at the screen for a longer time makes me tired	91	91	0	0	9	9
Less scope for co-curricular/ extracurricular activities	65	65	8	8	27	27
Less scope of being influenced by the teacher's behavior	82	82	6	6	12	12

Source: Responses of learners

It is clearly visible from table 2 that 69% of learners feel isolated when they study in ODL and 595 of learners rejoined that they have no scope for enjoying campus life (Muthuprasad et.al. 2021) whereas 91% of learners revealed that they feel tired by looking on the screen for a longer time at the time of online class(Al Rawashdeh,et.al. 2021). 65% of learners stated that there is less scope in ODL for co-curricular/ extracurricular activities as compared to conventional system. It is mentioned by almost 82% of learners that they have less scope of being influenced by the teacher's behavior.

Analysis of objective **2**: To study the perspectives of learners about satisfaction level regarding ODL.

Table 3: Responses of Learners on Satisfaction Level Regarding ODL

	Satisfied		Dissatisfied	
Satisfied with ODL	F	%	F	%
Learner-teacher interaction during online	72	72	28	28
teaching and learning				
Teaching of teachers in ODL mode	68	68	32	32
Course material is appropriate and	86	86	14	14
understandable				
The feedback of teachers in ODL is helpful	74	74	26	26
The institutional network of technical assistance	63	63	37	37

Source: Responses of learners

From table 3 it can be seen that around 72% of learners were satisfied with the learner-teacher interaction during online teaching (Garrison 2000)and learning and 68% of them were satisfied with the teaching of teachers in ODL mode (Mushtaha 2022). About 86% of learners believed that the course material is appropriate and understandable and 74% of learners were satisfied with the feedback of teachers in ODL is helpful. 63% of learners were satisfied with the institutional network of technical assistance.

Analysis of objective **3**: To study the perspectives of learners about challenges in ODL.

Table 4: Responses of Learners on Challenges in ODL

	Agree		Neutral		Disa gree	
Challenges in ODL	F	%	F	%	F	%
Lack of sufficient time for study	65	65	4	4	31	31
Lack of support from family, employer, friends, etc.	61	61	9	9	30	30
Difficulty in managing family/ work and study schedule	57	57	5	5	38	38
Financial constraints	74	74	5	5	21	21
Difficulties in accessing and using ICT	46	46	1 1	11	43	43
Face problems of network connectivity in online classes	73	73	4	4	23	23
Delayed arrival of study material	15	15	6	6	79	79

Source: Responses of learners

From above table 4 it is evident that 65% of learners agreed that they didn't get sufficient time for study (Arinto, 2016)and 61% of them reasoned that this is due to Lack of support from family, employer and friends, etc.(Maxwellet.al. 2015) and 57% of learners face difficulty in managing family/work and study schedule (Panchabakesan 2011; Musingafi 2015). 74% of learners mentioned that they have face financial constraints (Panda & Mishra 2007; Bali & Liu 2018) while studying in ODL whereas 46% of learners accepted that they face difficulty in accessing and using ICT (Rashid and Rashid 2011). 73% of learners face problems of network connectivity in online classes as majority of learners are from rural and backward areas however 15% of learners stated that they receive the study materials very late this may be due to postal service which might work slow or dispatched to the wrong person (Rashid and Rashid 2011; Arinto, 2016).

Analysis of objective 4: To find out the suggestion of learners about the betterment of ODL

Table 5: Suggestions given by the Learners

	Provided by	
Suggestions	F	%
More interactive video lectures	45	45
To open up various other professional courses	53	53
The study materials must be timely dispatched	31	31

From table 5 it is evident that 45% of the learners to make more interactive video lectures on programmes offered by the university, 53% of learners to open up various other professional courses which may provide more opportunities to the learners to get into jobs and 31% of learners suggested that the study materials must be timely dispatched.

Conclusion

As there are many trends in higher education which can influence the future of India in this order distance learning is one of the most preferred mode of education among working people. In Chhattisgarh state Pt. Sundarlal Sharma (Open)

University i.e. PSSOU is performing this task very well. PSSOU is the first option of working learners to fulfill their dream of getting enrolled in the programmes offered by this university and continue their higher education. Although there are some challenges like network issue which acts as barriers sometimes (for the learners) even though the programmes offered by the institution are highly demanding.

REFERENCES

- Almahasees, Z., Mohsen, K. & Omer, M. (2021). Faculty's and Students' Perceptions of Online Learning During COVID-19. Frontiers in Education, 6, 1-10. DOI:10.3389/feduc.2021.638470
- Arinto, P. B. (2016). Issues and Challenges in Open and Distance e-Learning: Perspectives from the Philippines. *The International Review of Research in Open and Distributed Learning*, 17(2). DOI: 10.19173/irrodl.v17i2.1913
- Bali, S. & Liu, M. (2018). Students' perceptions toward online learning and face-to-face learning courses. *Journal of Physics: Conference Series.* 1108. 012094. DOI:10.1088/1742-6596/1108/1/012094.
- Garrison, R. (2000). Theoretical challenges for distance education in the 21st century: A shift from structural to Transactional issues. *International review of research in open and distance learning*. 1(1), 1-17. DOI:10.19173/irrodl.v1i1.2
- Kalaivani, A. (2014). Role of E-Learning in the Quality Improvement of Higher Education. *IOSR Journal of Humanities and Social Science*, 19(11), 15–17. https://doi.org/10.9790/0837-191151517
- Mushtaha, E., Abu Dabous, S., Alsyouf, I., Ahmed, A. & Raafat Abdraboh, N. (2022). The challenges and opportunities of online learning and teaching at engineering and theoretical colleges during the pandemic. *Ain Shams Engineering Journal*, 13(6), 101770. https://doi.org/10.1016/j.asej.2022.101770
- Musingafi, M. C. C., Mapuranga, B., Chiwanza, K. & Zebron, S. (2015). Challenges for Open and Distance learning (ODL) Students: Experiences from Students of the Zimbabwe Open University. *Journal of Education and Practice*, 6(18), 59-66.

- Muthuprasad, T., Aiswarya, S., Aditya, K. S. & Jha, G. K. (2021). Students' perception and preference for online education in India during COVID -19 pandemic. *Social Sciences & Humanities Open*, 3(1), 100101. https://doi.org/10.1016/j.ssaho.2020.100101
- Panchabakesan, S. (2011). Problems and Prospective in Distance education in India in the 21st century. Problems of Education in the 21st Century, 30(1), 113-1122.
- Panda, S. & Mishra, S. (2007). E Learning in a Mega Open University: Faculty attitude, barriers and motivators. *Educational Media International*, 44(4), 323–338. https://doi.org/10.1080/09523980701680854
- Rawashdeh, A., Youssef, E., Alarab, A., Alarab, M. & Al-Rawashdeh, B. (2021). Advantages and Disadvantages of Using e-Learning in University Education: Analyzing Students' Perspectives. *Electronic Journal of e-Learning*. 19. 107-117. DOI:10.34190/ejel.19.3.2168.

Revamping Equity Through Constructive Pedagogy: A Narrative from NEP-2020

-Mallicka Banerjee¹ & Dr. Ayan Mukherjee²

ABSTRACT

National Education Policy (NEP), 2020 is considered as a milestone in the history of education in independent India. Ministry of Human Resource Development (presently Ministry of Education) composed this elaborate and holistic framework to reform the landscape of Indian education system. From last implemented policy since 1986. This policy introduces sweeping changes in the domain of school education, higher education, assessment mechanism, pedagogy, course curriculum, multiple entry – exit gateway, credit banks, regulatory governance and introduction of open world class universities. However, these changes is being framed to reduce the rate of attainment gaps and to improve the attitude towards sustainable assimilation of knowledge. Our present study narrates the importance of pedagogy to establish equity in classroom from the perspective of NEP, 2020. Inclusive classroom is one of the major visions of this policy, where all

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the students are to be valued and treated inclusively irrespective of their different social and cultural abilities. This equitable environment of inclusive classroom can be achieved through constructive and focused pedagogy, which would facilitate zeal for knowledge amongst student through the process of action, refection and construction.

Keywords: NEP, 2020, Equity, Pedagogy, Inclusive, Retention.

Introduction

In the year 2019, Ministry of Human Resource Development (MHRD) of India published the draft for National Education Policy (NEP) and trailed for consultation from different stake holders (Ministry of Human Resource Development, 2020). This policy was structured to take the future education system of India to new heights. This draft framework discusses reducing curriculum to promote quality based essential learning. So, in the year 2020, for the first time in twenty first century, India has come up with a comprehensive and inclusive education policy for all the levels of Indian education system. Government of India composed this holistic framework to bring transformation in the domain of school and college education systems with new pedagogic approach, multidisciplinary curriculum, learning through experiments, new assessment mechanism, credit banks, multiple entry and exit and dynamic regulatory governance. However, these initiatives is being formulated to reach optimum attainment level and to promote education among all the people of India irrespective of their social, cultural and economic background. So, this is being considered that after successful implementation, National Education Policy 2020 (NEP, 2020) could emerge as a new milestone for Indian education system.

In the era of globalization and digital communication system, this policy was crafted to satisfy the need of contemporary society for skill based knowledge and ensuring the intensive utilization of human resources. To ensure quality education along with continuous learning process, five pillars namely Access, Equity, Quality, Affordability and

Accountability was considered while framing NEP, 2020. These five pillars are enlisted in United Nation Sustainable Development Goals (SDG), 2030 as well(UNESCO, 2017). NEP 2020 was framed to not only transform school education system, but also to reform higher education system of India. These reforms are considered to provide upcoming students with flexibility in their study and inculcate innovativeness in them. Thus, this policy exserted much emphasis on participation based learning activity, equitable and inclusive environment, incorporation of regional languages and cultures and equitable use of digital education.

India positioned itself quite well amongst the fast growing countries in the world. It is being projected that, by 2030, India will become the youngest country as the number of youth population will grow accordingly(OECD, 2018). Skill and knowledge that they would perceive will be having huge impact on the future prospect of our nation. Hence, education is considered to be one of the major tools to balance this population with the changing socio-economic sphere. Exploring use of technology further, for the betterment of the society and finding sustainable solution for ever depleting natural resources, were the major thrust area of NEP, 2020. Big data analysis, Digital Intelligence, Machine Learning, GIS, Remote Sensing are those major sectors, where skilled personnel are required with multidimensional knowledge. On the other hand, while natural resources are shrinking every passing day, sustainable preservation of natural resources and exploring sustainable renewable resources as a substitute are the major emerging challenges for the present and future generations. With the globalization, digitalization and advancement of technology, employment landscape is changing very fast. As India is poised to play a major role at global stage, it is need of the time to shape our students with multidimensional knowledge and skills as they will eventually become our future workforce. Students need to learn how to construct knowledge, assessing them critically and use them in solving the problems. Fundamental objectives of NEP, 2020 also emphasizes on the relevance of pedagogic approaches, that will foster inclusive learning environment through constructive and reflective learning and skill development to reach the Gross Enrolment Ratio (GER) in higher education to 50% by 2035 from 26.30% by 2018. Hence this article narrates the views of NEP, 2020 to maintain equity in higher education institutions through constructive pedagogy.

Equity in Different Education Policies of India

Inclusion through education policies directs the efforts to ensure all the individual of the society have equal opportunity to get the education. Promoting inclusive educational policy is important to address the issue of longitudinal social discrimination from society. The prime focus of India's new education policy is to include all the children into education system and to achieve 50% enrollment in higher education. As far social policy is concerned, inclusive education system is a major thrust area since early 1990s. United Nation's Education for All (EFA) movement also framed to provide basic education to all the children (Davis & Bérubé, 2002). In the year 2000, World Education Forum marked some justification towards inclusive education(UNESCO. UNICEF, 2015).

Teaching-learning justification: Inclusive education system is required to inculcate education among all the children together in response to their individual differences.

Social-cultural justification: Inclusive education should be structured to involve all the communities together in the education system to promote social cooperation.

Economic justification: This education is likely to be cost effective so that everyone of the society could easily afford the education.

Furthermore, International conference of UNESCO themed 'Inclusive Education: The Way of The Future', which also argued to frame policy to promote educational opportunities for all(Kaurav, 2020). India also framed a number of policies to involve all the children in education system irrespective of social and cultural barriers.

In National Policy on Education, 1968 equity was addressed to promote higher education among urban and rural children (India, 1968). This policy was structured on the recommendations of Kothari Commission (1964-66) and it was considered as a radical reform in Indian education system to promote national integration and social inclusion (India, 1968). 42nd Constitutional Amendment Act was passed in 1976 by which education was become a part of concurrent list which further promote regional influence on higher education system. In 1986, National Policy on Education (NPE) was implemented with two major inclusive dimensions:

- 1. Promotion of adult education through open and distance learning.
- 2. Empowerment of minorities through the utilization of affordable and accessible resources.

This policy is also known for giving importance on the elimination of inequalities and promoting equal opportunities for all the socio-culturally and economically backward sections of our society (India, 1986).

NEP, 2020 was framed to ensure equal opportunity for all the children to excel in the domain of acquiring knowledge. Special emphasis was given on socially and economically disadvantaged groups (SEDGs), gender, geographically isolated group, children with disabilities. The blueprint to maintain equity in society has been originated from the Constitution of India which implies to ensure the interest of every individual being irrespective of their diversity.

Nurturing Constructive Pedagogy to Promote Equity in Higher Education:

As per Salamanca statement, to promote inclusiveness in the education system, efforts should be made to create better learning environment rather than repeated attempts to include all backward sections in the classroom. (Mel Ainscow, 2006) suggested that inclusive education can be considered as a process that is concerned about the removal of barriers and could promote active participation and achievements among

all the students. NEP,2020 framed to promote universal access at all levels of school and higher education system by providing them inclusive environment with quality education. To promote holistic development amongst learners by acquiring new skills, content and critical learning techniques, NEP, 2020 recognizes flexibility for teachers to adopt innovative pedagogy and also suggests restructuring of curricula. As recognized by NEP, 2020, constructivist pedagogy is one of the broad pedagogical approaches which nurtures inclusive environment and this constructivist environment within education system, not only supports learning but also strengthens the niche to facilitate achievements amongst the students.

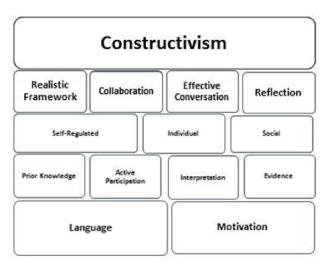


Fig 1: Tree Map on Important Principles of Constructivism

This policy visualizes greater flexibility in higher education institutions and choice based credit system through constructivist transaction approach to facilitate learners to harness their capabilities and competency. (Hussain, 2012) suggested higher education to be an apex body of educational hierarchy whose prime focus should be knowledge creation and transmission. Besidesbasic teaching and learning activities, research along with instructional approaches, infrastructure and innovation play an important role to create sustainable

environment for learning in higher education institutions. To develop the effective competency among the learners, NEP,2020 also suggests the method of transaction, which is to be shiftedfrom teacher centered classroom techniques, towards experiential learning, problem solving methods, critical thinking and independent constructive learning.

Constructive pedagogy focuses on the active participation of the learners within the purview of learning process, where they will be responsible for assimilating their own knowledge by themselves. According to (Vygotsky, 1980)gaining knowledge is the social interpretation of the evidences what learners experience. The root of this approach primarily found in science and mathematics classroom settings where meaningful knowledge is being constructed through unfolding the events as opposed to frontal one-way teaching (Kaufman, 2004). This theory argues that learning and assimilation of knowledge into the learners takes place simultaneously, where teachers play a pivotal role as a facilitator of gaining knowledge. (Krahenbuhl, 2016) strongly argued that in 21st century, constructivism approach could emerge as one of the most influential philosophies in higher education, but he also raised his concernsregarding its proper application in all domains of higher education. Constructivism approach is very important tool to achieve academic self-efficacy as it helps to construct the real knowledge in individual or in collaboration (Kanuka, 1999).

Implication on Science Pedagogy

Constructivism provides a solid theoretical framework for developing science pedagogy. This pedagogy framework considers co-operative learning techniques, development of alternative concept and conceptual change during learning as the core elements of this framework. There are two knowledge sources available to the learners. Firstly, the knowledge which learners gain by interacting with their surroundings. It can be classified as the intuitive knowledge to a specific learner. Secondly, the knowledge, that is being gained by receiving

appropriate instructions. This kind of knowledge is focused and formal (Dewey, 1938). With the changing realm of curriculum, constructive pedagogy also focused upon cooperative activity to facilitate interactions among the students more effectively and to make the students comfortable to share their own knowledge. During this process, students argue, exchange their thoughts and can assess the process to make the learning activity more realistic (Mehta & Kulshrestha, 2014). Multiple studies have shown (Mustafa, 2008) that whenever students encounter with different content in the classroom, they develop different alternative concept on the basis of primary interaction, and the concepts they develop are completely based on their prior knowledge (it can be intuitive or focused knowledge), individual cognitive structure, what teachers have already taught them, the aids and language teacher have used, and above all through various activities which develop different learning outcomes within students. Through continuous interaction with peers and teachers, learners are being able to build formal knowledge by eliminating mis-appropriate conception. Conceptual change in learners can only be inculcated by changing teaching strategy and by creating inclusive environment in the classroom by the teachers. Therefore it is recommended that teachers should be familiar with their students, so that cognitive conflict session (Hewson & Thorley, 1989) can be applied more scientifically to explore the inherent ideas from the learners without considering right and wrong.

Implication on Social Science Pedagogy

As far as social science is concerned, NEP, 2020 suggested roadmap to apply constructivist approach in social sciences as well. (Hoagland, 2000)described the importance of learning environment to revitalize the participation and joy of learning under constructivism. In respect to individual learner, real learning can only be achieved when they assimilate new ideas. By this whole process, learners become capable of analyzing entire array of ideas from which the real facts gradually get

shaped in their mind. Group constructivism also plays an important role to construct new knowledge by interacting with others. This also motivates learners to develop their mind set to work in a group. In 1993, Mckay *et. al.*recommended customized, student centric curriculum over standardized curriculum for the fruitful implementation of constructivism (Mckay, 1993). It is being encouraged that learners must perceive Facts and ideas through proper analysis, interpretation and prediction of knowledge under the guidance of teachers. NEP, 2020 included this framework as well, to promote constructivism pedagogy in higher education.

Implication on Language Pedagogy

Use of constructivist approach also got extended in the field of linguistics as well. While teaching languages, constructivism promotes creative classroom activities, co-operative learning, action oriented activities to promote the participation of every learner in diversified classroom (Suhendi, 2018). In the domain language pedagogy, autonomy to the learners and minimizing influence of the teachers has been encouraged to dig out the best potentials amongst learners. Content-oriented learning environment also be implemented to promote bilingual environment. It also develops additional knowledge to write poetry, short stories, drama, reporting facts through exploring the curious nature of the students.

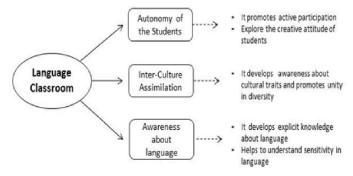


Fig 2: Flow Diagram on the Basic Principles of Constructivist Approach in Language Classroom

Information and Communication Technology enabled Learning in Constructivist Approach

Information and Communication Technology (ICT) could be explored in a meaningful way in higher education to have a greater impact on learners.ICT promotes synchronous and asynchronous learning, where participants can avail, construct and share their contents. With the advancement of accessibility of ICT, students are getting redirected towards digital platforms to gather informations. Recognizing ever increasing significance of digital platform, NEP,2020 recommended ICT to be pervasive throughout the learning process in higher education system. Prior experiences that we gathered during SARS-CoV-2 (COVID-19) pandemic showed us the need for proper direction and guidance to explore ICT based pedagogy to create equilitarian environment in classrooms. So, digital education platforms like MOOCs (Massive Open Online Courses), SWAYAM etc. have been developed and promoted by Govt. of India to connect and enable teachers and students pan-India to access education at their convenience. According to social constructivist theory, it can be argued that the adaptation of ICT in learning process could help learner to converge all the stakeholders of the society e.g. peer, parents, teachers, community members, to gain learning experience. This approach describes the learning process as a contextual and social activity (Tinio, 2003). Social constructivist approach also followslearner centric environment to promote self-oriented collaborative learning path (Phillips & Curtis, 2007). Within the framework of this approach, two different metaphor is working together to create effective learning environment i.e. participation and acquisition(Sfard, 1998). With the evolution of digitalization in classrooms, role of technology in teachinglearning process is gaining its momentum every passing day. Besides that, instead of being just inquirers, learners must actively involve themselves for knowledge constructing community development (Scardamalia & Bereiter, 2006). Under this pedagogy, knowledge can also be improved with the growing number of experienced community.

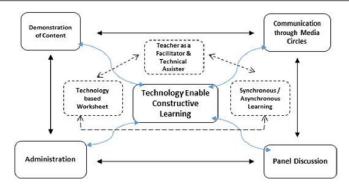


Fig 3: Flow Map on Technology Enable Constructivist Approach

Conclusion

As global economic center is gradually shifting towards east and as India is slowly reclaiming its global stature as it was in the past, it is the need of time that India must get prepared for the challenges that eventually it has to confront in future. To deal with such anticipated circumstances, the wiser option is to develop and equip the future human resources of this country with proper skill and attitude and aptitude. NEP 2020 has been framed with the same purpose replacing NEP 1968, NEP1986. The NEP 2020 provides an intensive and broad framework for overall development of each and every domains of education system in this country. An extensive focus has also been proposed on reshaping of curriculum and pedagogy. Constructive pedagogy in this regard is capable of inculcating the ability of critical thinking and providing experiential learning among the students, whichhas been emphasized in NEP 2020. NEP 2020 proposed to introduce problem solving methods, enquiry methods, brain storming sessions and thought raising questions in the curriculum. It provides freedom and flexibility of learning to the students by introducing the multi-disciplinary, inter-disciplinary, and transdisciplinary approaches. This policy also advocates vocational skills development amongst studentsnot only to address employability through skill development but also to confront India's future challenges. Ensuring proper execution of this policy could to revolutionize the education scenario of India in coming future which ultimately would facilitate India's goal of becoming an economic power house and superpower.

REFERENCES

- Ainscow, M., Booth, T. & Dyson, A. (2006). Improving Schools, Developing Inclusion (1st ed.). Routledge. https://doi.org/10.4324/9780203967157
- Davis, L. J. & Bérubé, M. (2002). Bending Over Backwards: Disability, Dismodernism, and Other Difficult Positions. Semantic acholar. Retreived from https://www.semanticscholar.org/paper/Bending-OverBackwards%3ADisability%2C-Dismodernism DavisB%C3%A9rub%C3%A9/644d6e6cd5220a 4586d b4c195c66d44592c6bcbf
- Dewey, J. (2021). Experience and Education. The Macmillan company.

 Retrieved from https://openlibrary.org/books/
 OL6367993M/Experience_and_education
- Hewson, P. W. & Thorley, N. R. (1989). The conditions of conceptual change in the classroom. *International Journal of Science Education*, 11(5), 541-553.
- Hoagland, M. A. (2000). Utilizing Constructivism in the History Classroom. Retreieved from https://www.researchgate.net/publication/234593360_Utilizing_Constructivism_in_the_History_Classroom
- Hussain, I. (2012). Use of Constructivist Approach in Higher Education: An Instructors' Observation. *Creative Education*, 3(2), 179-184.
- Kanuka, H. & Anderson, T. (1999). Using constructivism in technology-mediated learning: Constructing order out of the chaos in the literature. *Radical Pedagogy*, 2. Retreieved from https://www.researchgate.net/publication/228915536_ Using_constructivism_in_technology-mediated_learning_ Constructing_order_out_of_the_chaos_in_the_literature
- Kaufman, D. (2004). Constructivist Issue in Language Learning and Teaching. *Annual Review of Applied Linguistics*, 24, 303-319.

- Kaurav, R. P. S., Suresh, K.G., Narula, S. & Baber, R. (2020). New Education Policy: Qualitative (Content) Analysis And Twitter Mining (Sentiment Analysis). *Journal of Content, Community & Communication*, 12, 1-10.
- Krahenbuhl, K. S. (2016). Student-centered Education and Constructivism: Challenges, Concerns, and Clarity for Teachers. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 89(3), 97-105.
- Mckay, R. (1993). Constructivism: Defining our Beliefs, Examining our Practices. *Canadian Social Studies*, 27(2), 47-48.
- Mehta, S. & Kulshrestha, A. K. (2014). Implementation of Cooperative Learning in Science: A Developmental-cum-Experimental Study. *Education Research International*, 2014. https://doi.org/10.1155/2014/431542
- Ministry of Education (n.d.) *National Policy On Education 1968*. Government of India. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/document-reports/NPE-1968.pdf.
- Ministry of Education (n.d.). *National Policy on Education, 1986 (As modified in 1992)*. Government of India. Retrieved from https://www.education.gov.in/national-policy-education-1986-modified-1992
- Ministry of Human Resource Development (2020). *National Education Policy* 2020. Government of India. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Mustafa, C. (2008). Constructivist Approaches to Learning in Science and their Implications for Science Pedagogy: A Literature Review. *International Journal of Environmental and Science Education*, 3(4), 193-206.
- OECD. (2018). The future of Education and Skills: Education 2030. Retrieved from https://www.oecd.org/education/2030project/about/E2030_Introduction_FINAL_post.pdf
- Phillips, P. & Curtis, R. (2007). A Case Study of the Relationship Between Socio-Epistemological Teaching Orientations and Instructor Perceptions of Pedagogy in Online Environments. Semantic Scholar. Retreieved from https://www.semanticscholar.org/paper/A-Case-Study-of-the-Relationship-Between-

- Teaching-Phillips-Curtis/0442c4c3e01ad 65036381 f5f26e81e7c605b149a
- Scardamalia, M. & Bereiter, C. (2006). Knowledge Building: Theory, Pedagogy, and Technology. In K. Sawyer (Ed), *The Cambridge handbook of the learning sciences.* (pp. 97-115). Cambridge University Press. DOI:http://dx.doi.org/10.1017/CBO9781139519526.025
- Sfard, A. (1998). On Two Metaphors for Learning and the Dangers of Choosing Just One. *Educational Researcher*, 27(2), 4-13.
- Suhendi, A. & Purwarno. (2018). Constructivist Learning Theory: The Contribution to Foreign Language Learning and Teaching. *KnE Social Sciences*, 3(4), 87–95.
- Tinio, V. L. (2003). *ICT in education*. United Nation, Digital Library. pp.37-41. Retreieved from https://digitallibrary.un.org/record/524544
- UNESCO (2017). Education for Sustainable Development Goals: learning objectives. ISBN:978-92-3-100209-0
- Vygotsky, L. S. (1980). *Mind in Society: The Development of Higher Psychological Process.* London: Harvard University Press. Retreieved from https://www.hup.harvard.edu/catalog.php?isbn=9780674576292

Pedagogical Wellbeing in Higher Education: Envisions in National Education Policy 2020

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ABSTRACT

21st-century higher education aims to develop good, thoughtful, well-rounded, and creative individuals. In addition, it aims to promote high-quality learning outcomes and students' personal growth and wellbeing. According to National Education Policy 2020 (NEP 2020), higher education must play a vital role in promoting human as well as societal wellbeing. But it can only be possible by ensuring a good institutional environment, pedagogical practices, and community members' wellbeing. Therefore, it demands pedagogical wellbeing at Higher Education Institutions (HIEs). Pedagogical wellbeing, a core teaching and learning process, includes planning and carrying out instructional activities, good interaction among students, teachers,

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and other institutional community members, exercising leadership in the institution and community, and empowering students and teachers to experience joy and satisfaction in their daily teachinglearning activities. It has several domains or subcategories and is also affected by various internal and external factors. Teachers and students must adopt many strategies and practices to experience a positive cycle of pedagogical wellbeing and cope with several pedagogically challenging situations in higher education. This paper gives an overview of the essence, concept, domains, factors, and dimensions of pedagogical wellbeing and some strategies for promoting it in the light of NEP 2020 at the higher education level.

Key Words: Pedagogical Wellbeing; Higher Education; **NEP 2020**

Introduction

21st-century higher education aims to develop good, thoughtful, well-rounded, and creative individuals. It has two main goals, to promote quality learning outcomes and students' personal growth and wellbeing. In developing India, NEP 2020 (National Education Policy 2020) envisioned that higher education plays an extremely important role in promoting human as well as societal wellbeing. A quality higher education enables personal accomplishment and enlightenment, constructive public engagement, and productive contribution to society (NEP, 2020). It prepares students for more meaningful, satisfying lives and wellbeing, good citizenship, and enables economic independence. Teachers and students are the core members of higher education institutions. Their wellbeing, life satisfaction, and happiness are essential for effective pedagogical orientations, and perceptions toward the institutional community. They perceive social interaction inside the institutional community as being the most rewarding as well as the most problematic part of their institutional career (Pyhältö et al., 2010). Therefore, Teachers' wellbeing is important because it impacts teachers' ability to complete pedagogical activities and also impacts student wellbeing (Namestnik, 2022). This means that pedagogical wellbeing is closely entwined with the success of the pedagogical task, which in turn is linked to the ability of the teacher to develop and revise their pedagogical actions (Soini et al., 2010). The quality of pedagogical processes in the institution can be assessed by examining to what extent they facilitate the preconditions for learning and wellbeing both for students and teachers (Butler and Shibaz 2008; Retelsdorf et al. 2009). In this context, the effective interaction with institutional community members, the interrelated nature of the teaching-learning process, and wellbeing within the institutional environment are here referred to as pedagogical wellbeing. More specifically, capable, skillful, and motivated teachers promote active and functional teachinglearning strategies and consequently achieve the best learning outcome for students (Bolhuis & Voeten, 2004; Hoekstra, Beijaard, Brekelmans, & Korthagen, 2007; Hoy, Hoy, & Kurz, 2008). Pedagogical wellbeing within institutional communities can generate feelings of engagement, empowerment, and capacity building and a sense of satisfaction or feelings of joy and happiness for the participants of the pedagogical processes (Boekaerts 1993; Krapp 2005; Konu et al. 2002; Savolainen 2001; Pelletier et al. 2002; Silins and Mulford 2002; Van Houtte 2006). The empowered, engaged, motivated, and skillful teachers are also more likely to implement pedagogical innovations in their daily activities (Soini et al., 2010), and teacher-professional collaboration enhances classroom practice, which in turn promote a positive sense of pedagogical wellbeing(Murphy et al., 2020). Pedagogical wellbeing is a core process of teaching-learning activities, which is generated by everyday effective and quality teaching-learning process within an institutional environment.

Pedagogical wellbeing is a new concept and has not been focus in our country, unlike other countries. Therefore, the present study has been undertaken to explore the concept, dimensions, and factors of pedagogical wellbeing in the light of NEP 2020 and establish it as an emergent concept. The present study also suggests some ways to improve pedagogical wellbeing.

Importance of Pedagogical Wellbeing in light of **NEP 2020**

To achieve the SDG4, in 2015 India has adopted the agenda to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. This agenda has been severely reflected in NEP 2020, which proposes to revise and revamp all aspects of the education to create a new system that is aligned with the aspirational goals of 21stcentury education, which will be based upon India's traditions and value systems (NEP 2020). For achieving such a lofty goal, it recommends to reconfigure the system of education to support and foster learning with joy and happiness. In this context, a well organised higher education system could significantly contribute towards sustainable livelihoods and economic development of the nation (NEP 2020). Therefore, higher education must move towards less content, developing critical thinking, problem solving, creative abilities and follow a multidisciplinary approach to teach how to innovate, adapt, and absorb new material in novel and changing fields (NEP 2020). For this purpose, pedagogy must evolve to make education more experiential, holistic, integrated, inquirydriven, discovery-oriented, learner-centered, discussion-based, flexible, and, of course, enjoyable (NEP 2020). That is the main focus of pedagogical wellbeing, which requires for improving quality teaching-learning in higher education. Teachers' pedagogical wellbeing is important for effective classroom practice in higher education (McCallum & Price, 2010; Owen, 2016). Therefore, while implementing the NEP 2020 the stakeholders should focus to cultivate and promote pedagogical wellbeing of higher education community members.

Pedagogical Wellbeing

In a general sense pedagogical wellbeing refers to wellbeing in the teaching-learning situations. The term emerged by combining the two words pedagogy and wellbeing. Pedagogy refers to the science as well as art of teaching. With passage of time some other allied terms like andragogy and heutagogy were also used. These terms generally used to talk about teaching-learning situations for students with different age groups. The other term 'wellbeing' refers to wellness, values, positive and negative emotion, satisfaction, and quality of life (Diener, 2000, 2009). Wellbeing is a multidimensional concept covering an individual's psychological, emotional, social, and physical aspects (Alam et al., 2018). It has several dimensions such as emotional, social, physical, spiritual, workplace, employee, hedonic, eudaimonic, psychological, subjective (Diener, 2009; Diener, 2000, Alam et al., 2018). Like various other types of wellbeing, pedagogical wellbeing is also associated with some other kinds of wellbeing, such as teachers' wellbeing, students' wellbeing, occupational wellbeing, psychological wellbeing, and so on. However, we should not be confused with the other kinds of wellbeing, it is totally a new concept strongly related but not limited to other types of wellbeing. The main focus of which is joyful teaching-learning in a healthy institutional environment (Soini et al., 2010).

Pedagogical wellbeing constructed in the core processes of teachers' work that is, carrying out and developing teachinglearning process, including planning classroom activities, interacting with students as well as community members of the institution, evaluations, and choosing and developing instructional tools' (Murphy et al., 2020). According to Soini et al., (2010), Pedagogical wellbeing is a part of teachers' occupational wellbeing, along with other important elements, such as leadership, continuity, workload, resources, and teaching-learning activities inside the institutions (Meriläinen & Pietarinen, 2007; Rudow, 1999). It is simultaneously the experience of a teacher's empowerment, joy, and satisfaction in their classroom interactions with students along with feelings of anxiety and stress caused by problems in collaborating with other community members (Soini et al., 2010). Therefore, the construction of pedagogical wellbeing can be understood as a learning process that promotes relatedness, competence, and autonomy (Deci and Ryan 2002; Lazarus and Lazarus 1994; Sheldon and King 2001; Hakanen et al. 2005; Hakkarainen et al. 2004; Krapp 2005; Seligman and Csikszentmihalyi 2000). Pedagogical wellbeing is constructed in the interaction processes of an institution's multilevel learning environment, not only with students but also with colleagues, families, and other members of the institution (Soini et al., 2010). Pedagogical wellbeing indicates the ability of the students and teachers to participate in everyday practices of the teaching-learning environment and classroom activities (Pyhältö et al., 2010). However, the major characteristic of pedagogical wellbeing is the types of pedagogical interactions that promote students' and teachers' satisfaction, engagement, and empowerment are participants' perceptions of themselves as active learners and their experience of a sense of coherence, meaningfulness, and belonging (Antonovsky 1987, 1993; Bowen et al. 1998; Torsheim et al. 2001; Pallant and Lae 2002; Kristersson and Öhlund 2005; Morrison and Clift 2005; Deci and Ryan 2002; Ryan and Deci 2001).

In a simple sentence pedagogical wellbeing can be understood as a part of wellbeing of everyday teaching-learning activities within the institutional environment. Pedagogical wellbeing, a core of teaching and learning process which includes planning and carrying out instructional activities, emotional and lovable interaction among students, teachers, and other institutional community members, exercising leadership in the institution and community, and engaging and empowering students and teachers to experience joy and satisfaction in their daily teaching-learning activities.

Dimensions of Pedagogical Wellbeing

The concept of pedagogical wellbeing can be best understood through studying its various aspects or dimensions. Soini et al. (2010) noted that teachers' pedagogical wellbeing is constructed based on three primary contexts of their daily work, viz. student interaction, the peer interaction within the teacher community, and the teacher–parent interaction. Murphy et al. (2020) also identified four interdependent aspects of teachers' pedagogical wellbeing, viz. interactions with students; interactions with colleagues; making evaluations; and choosing and developing instructional tools. Likewise, Namestnik, (2022) reported that teachers' wellbeing depends upon three key components viz. co-worker relationships, student-teacher relationships, and administrator-teacher relationships. Kwon et al., (2021) divide teachers' wellbeing as professional, psychological, and physical wellbeing. On the other hand, Pyhältö et al. (2010) categorised three exclusive primary contexts of students' pedagogical wellbeing such as, student-student interaction, teacher-student interaction, and academic and extracurricular mastery. Braun et al., (2022) also noted that student wellbeing had three indicators, viz. student-reported positive outlook, student-reported emotional distress, and peer-reported pro-social behavior.

From the previous studies in this field it is clearly visible that pedagogical wellbeing has two broad aspects viz. teachers' pedagogical wellbeing and students' pedagogical wellbeing. However, pedagogical wellbeing can be classified under six different dimensions or sub-categories, such as (1) Student-Student Interaction (2) Teacher-Student Interaction (3) Teacher-Teacher Interaction (4) Interaction with Academic and Co-Curricular Activities (5) Interaction with Administration (6) Interaction with the Institutional Environment.

- Student-Student Interaction: students' peer interaction
 is an essential context for pedagogical wellbeing. The
 effective atmosphere of the institution stimulates
 student-student interaction and make good relationship
 among students, and as a result they enjoy their
 educational career.
- 2. Teacher-Student Interaction: Teacher-student interaction is another significant context for pedagogical wellbeing. It helps in both empowering and managing stressful events for teachers related to teaching-learning challenging situations with students, such as dealing with bullying, and loss of study motivation. Solving these types of problematic situations is also a core and at the same time a highly demanding pedagogical task.

- 3. Teacher-Teacher Interaction: Teachers' interaction with colleagues is also an important primary context of their pedagogical wellbeing. Therefore, teachers must emphasize on creating a collegial supportive environment which in return will act as a positive resource for their pedagogical wellbeing. On the other hand, a poor atmosphere, destructive friction inside the institutional atmosphere, and a lack of leadership can be burdensome and cause anxiety and stress.
- 4. Interaction with Academic and Co-Curricular Activities: In the teaching-learning process students and teachers interact through curricular and co-curricular activities as well as participating in more informal institutional events and activities. Therefore, this aspect is also needs to be focused in pedagogical wellbeing. Through this interaction, they reflect their role as a student or teachers both in terms of pedagogical activities and learning outcomes.
- 5. Interaction with Administration: The success of higher education very much depends upon a well-organised administration. For achieving the missions and visions of the institution there must be a well coordination among the different stakeholders. Therefore, teachers' interaction with the administration also play a vital role in pedagogical wellbeing, which acts as a positive resource for their pedagogical wellbeing.
- 6. Interaction with the Institutional Environment: It refers to the environment, where the teacher and students interacts through curricular and co-curricular activities. A positive institutional environment is prerequisite for an effective students-teacher interaction. A good relationship between students and teachers build in the institutional environment. Therefore, institutional environment is also a significant primary context of pedagogical wellbeing.

Factors Affecting Pedagogical Wellbeing

Institutions provide both challenges and opportunities for students and teachers' pedagogical wellbeing. Some elements challenge students' engagement and commitment to the institutional activities, as well as resources for positive study drive and satisfaction (Pyhältö et al., 2010). For example, a student may simultaneously experience empowerment, joy, and satisfaction along with feelings of anxiety and stress caused by problems in studying. On the other hand, the action orientation and coping strategies adopted by the teachers, such as avoidance or defensive strategies may gradually cause an inability to collaborate with community members, which could have a severe negative impact on the student's attitudes toward the institution as well as the teachers' occupational wellbeing (Soini et al., 2010). These kinds of strategies and practices can be more flexible, and reflective and may generate feelings of empowerment and support equal and reciprocal professional relationships with students and teachers (Soini et al., 2010).

There are many factors that negatively or positively affects pedagogical wellbeing. Namestnik (2022) and, McCallum and Price (2015, 2016) identified five key influential factors of pedagogical wellbeing such as socialization, policies, sports and exercise, religion, and professional development. In addition to these factors, there are many other internal and external factors that affects pedagogical wellbeing.

- 1. Socialization: it refers to the informal social interactions with students, teachers, and other community members, such as chatting, discussing, holiday celebrations, and sharing meals. Social interactions, like sharing meals play a positive role in promoting pedagogical wellbeing (Namestnik, 2022).
- **2.** *Policies:* Different education and other related policies of any nation and its implementation and other government initiatives sometimes positively or negatively contribute to pedagogical wellbeing.
- 3. Co-curricular activities: different co-curricular activities like games, sports and exercise, yoga and

religious or spiritual practices are also consideredas contributing factors to pedagogical wellbeing.

- 4. Professional Development: Professional development opportunities foster teachers' pedagogical wellbeing. Teachers attending training and workshops aimed to enhance their teaching abilities leave them feeling refreshed and inspired to do their job more efficiently.
- 5. *Institutional environment:* attractive and positive learning environments inside and outside of institutions inspire both students and teachers, which positively impact pedagogical wellbeing.
- 6. Teaching-learning methods and materials: Innovative and attractive teaching-learning methods and materials foster pedagogical wellbeing. Teaching methods such as discussion, demonstration, constructivist teaching methods, and teaching-learning materials such as projectors, charts, models, and pictures, all contribute to pedagogical well-being.
- 7. *Psychological attributes:* Psychological attributes of students and teachers like personality traits, emotions, attitude, interest, intelligence, achievement, self-efficacy, values, etc. are essential psychological characteristics that contribute to pedagogical wellbeing.

Suggestions for Improving Pedagogical Wellbeing

National education policy 2020 have been taken plenty of initiatives that promote pedagogical wellbeing among higher education students and teachers. Government and stakeholders should take responsibility for improving pedagogical wellbeing.

- 1. There should be a flexible, multilevel, play/activity-based learning opportunities in the curriculum which will promote pedagogical wellbeing.
- 2. As a part of positive psychology, pedagogical wellbeing should be included in teacher education courses.

- Government and policy makers should take initiative to promote satisfaction, and wellbeing among students and teachers.
- 4. Professional training plays an important role in pedagogical wellbeing, therefore, teachers and other stakeholders of institutions should be properly trained.
- 5. Make a positive institutional atmosphere and classroom environment where teachers, students, and other community members can effectively interact with each other.
- Needs to give importance to psychological attributes of students and teachers like emotion, attitude, interest, intelligence, achievement, self-efficacy, values, etc.
- 7. Teachers should use attractive and appropriate teaching aids for effective teaching.
- 8. The teacher should emphasize joyful learning, where students feel pleasure and a sense of satisfaction from the learning process.
- 9. Needs to move towards more holistic and multidisciplinary education, as suggested by NEP 2020.
- 10. Revamping curriculum, pedagogy, assessment, and student support for enhanced student experiences which will help increasing pedagogical wellbeing.

Conclusion

The success of any organisation depends upon its core components. Teachers, students, curriculum and environment are the key component of teaching-learning process. Therefore, the quality of teaching-learning should be judged based on the quality of these components. In an effective teaching-learning process the components effectively interacts with each other. The term 'pedagogical wellbeing' indicated the effective teaching-learning process. Which is a relatively new concept. Pedagogical wellbeing is a types effective interactions in the teaching-learning situation in a positive environment that promote students' and teachers' satisfaction, engagement, and empowerment are participants' perceptions of themselves as

active learners and their experience of a sense of coherence, meaningfulness, and belonging. The main focus of which is joyful teaching-learning in a healthy institutional environment, which is reflected in the NEP 2020. It has two main aspects viz. teachers pedagogical wellbeing and students pedagogical wellbeing, and six dimensions such as, Student-Student Interaction, Teacher-Student Interaction, Teacher-Teacher Interaction, Interaction with Academic and Co-Curricular Activities, Interaction with Administration, and Interaction with the Institutional Environment. To meets the demands of 21st century education pedagogical wellbeing is a vital weapon which needs to be sharpen through its effective practice. Teachers and students must adopt many strategies and practices to experience a positive cycle of pedagogical wellbeing and cope with several pedagogically challenging situations in higher education. Government should give importance on pedagogical wellbeing to fulfil the present day dreams by implementing NEP 2020. The concept of pedagogical wellbeing is not so popular in India. Therefore, more and more research is needed to explore it properly.

REFERENCES

- Allam, M. S., Adhikary, S. & Mohakud, L. L. (2018). Employee Well-Being: Concept, Dimensions And Factors. EDUQUEST An International Refereed Journal In Education, 7(2), 1-15.
- Antonovsky, A. (1987). Unraveling the mystery: how people manage stress and stay well. San Francisco: Jossey-Bass.
- Boekaerts, M. (1993). Being concerned with well-being and with learning. Educational Psychologist, 28(2), 149-167.
- Bolhuis, S. & Voeten, J.M.M. (2004). Teachers' conceptions of student learning and own learning. Teachers and Teaching: *theory and practice,* 10(1), 78–98.
- Bowen, G. L., Richman, J. M., Brewster, A. & Bowen, N. (1998). Sense of school coherence, perceptions of danger at school, and teacher support among youth at risk of school failure. Child and Adolescent Social Work Journal, 15(4), 273-286.
- Braun, S. S., Kaihoi, C. A., McDaniel, H. L. & Bradshaw, C. P. (2022). Profiles of teachers' occupational health: Associations with

- classroom management practices, gender, and race. *Teaching and Teacher Education*, 118. https://doi.org/10.1016/j.tate.2022.103819
- Butler, R. & Shibaz, L. (2008). Achievement goals for teaching as predictors of students' perceptions of instructional practices and students' help seeking and cheating. *Learning and Instruction*, 18(5), 453-467.
- Deci, E. L. & Ryan, R. M. (2002). Handbook of self-determination research. *The University of Rochester Press*.
- Diener, E. & Biswas-Diener, R. (2009). Will Money Increase Subjective Well-Being?: A Literature Review and Guide to Needed Research. In: Diener, E. (eds) The Science of Well-Being. Social Indicators Research Series, vol 37. Springer, Dordrecht. https://doi.org/10.1007/978-90-481-2350-6_6
- Diener, E. (2000). Subjective well-being the science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34-43. https://doi.org/10.1037/0003-066X.55.1.34
- Hakanen, J. J. Bakker, A. B. & Schaufeli, W. B. (2005). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513.
- Hakkarainen, K., Palonen, T., Paavola, S. & Lehtinen, E. (2004). Communities of networked expertise. *Professional and educational perspectives*. Oxford: Elsevier.
- Hoekstra, A., Beijaard, D., Brekelmans, M. & Korthagen, F. (2007). Experienced teachers' informal learning from classroom teaching. *Teachers and Teaching: theory and practice*, 13(2), 189-206.
- Hoy, A.W., Hoy, W.K. & Kurz, N.M. (2008). Teacher's academic optimism: The development and test of a new construct. *Teaching and Teacher Education*, 24, 821-835.
- Konu, A. I., Lintonen, T. P. & Autio, V. J. (2002). Evaluation of well-being in schools-a multilevel analysis of general subjective well-being. *School Effectiveness and School Improvement*, 13, 187-200.
- Krapp, A. (2005). Basic needs and the development of interest and intrinsic motivational orientations. *Learning and Instruction*, 15(5), 381-395.
- Kristersson, P. & Öhlund, L. S. (2005). Swedish upper secondary school pupils' sense of coherence, coping resources and

- aggressiveness in relation to educational track and performance. Scandinavian Journal of Caring Science, 19(1), 77-84.
- Kwon, K. A., Ford, T. G., Jeon, L., Malek-Lasater, A., Ellis, N., Randall, K., Kile, M. & Salvatore, A. L. (2021). Testing a holistic conceptual framework for early childhood teacher well-being. *Journal of School Psychology*, 86, 178-197. https://doi.org/10.1016/j.jsp.2021.03.006
- Lazarus, R. S. & Lazarus, B. N. (1994). Passion and reason: making sense of our emotions. *New York: Oxford University Press*.
- McCallum, F. & Price, D. (2016). Nurturing wellbeing development in education. *Routledge, NY*.
- McCallum, F.& Price, D. (2010). Well teachers, well students. *Journal of Student Wellbeing*, 4(1), 19-34. https://doi.org/10.21913/JSW.v4i1.599
- Meriläinen, M. & Pietarinen, J. (2007). Stress as a barrier to professional development. In Löwstedt, J., Larsson, P., Karsten, S.& Van Dick, R. (Eds). From intensified work to professional development (111-128). Berlin: P.I.E. Peter Lang.
- Ministry of Human Resource Development (2020). *National Education Policy* 2020. Government of India. https://doi.org/10.1201/9781003254942-12
- Morrison, I. & Clift, S. M. (2005). Mental health promotion through supported further education. The value of Antonovsky's salutogenic model of health. *Health Education*, 106(5), 365-380.
- Murphy, T. R. N., Masterson, M., Mannix-McNamara, P., Tally, P. & McLaughlin, E. (2020). The being of a teacher: teacher pedagogical well-being and teacher self-care. *Teachers and Teaching: Theory and Practice*, 26(7-8), 588-601. https://doi.org/10.1080/13540602.2021.1913403
- Namestnik, A. (2022). *An Exploration of Gender and Teacher Wellbeing in Cambodia and Kenya: A Qualitative Study.* In Graduate School of Duke University.
- Owen, S. (2016). Professional learning communities: Building skills, reinvigorating the passion, and nurturing teacher well-being and "flourishing" within significantly innovative schooling contexts. *Educational Review*, 68(4), 403-419. https://doi.org/10.1080/00131911.2015.1119101

- Pallant, J. F. & Lae, L. (2002). Sense of coherence, well-being, coping and personality factors: further evaluation of the sense of coherence scale. *Personality and Individual Differences*, 33(1), 39-48.
- Pelletier, L. G., Legault, L. & Séguin-Lévesque, C. (2002). Pressure from above and from below as determinants of teachers' motivation and teaching behaviours. *Journal of Educational Psychology*, 94 (1), 186-196.
- Price, D. & McCallum, F. (2015). Ecological influences on teachers' wellbeing and "fitness". *Asia- Pacific Journal of Teacher Education*, 43(3), 195-209.
- Pyhältö, K., Soini, T. & Pietarinen, J. (2010). Pupils' pedagogical well-being in comprehensive school-significant positive and negative school experiences of Finnish ninth graders. *European Journal of Psychology of Education*, 25(2), 207-221. https://doi.org/10.1007/s10212-010-0013-x
- Retelsdorf, J., Butler, R., Streblow, L. & Schiefele, U. (2009). Teachers' goal orientations for teaching: associations with instructional practices, interest in teaching, and burnout. *Learning and Instruction*. DOI:10.1016/j.learninstruc.2009.01.001.
- Rudow, B. (1999). Stress and burnout in the teaching profession: European studies, issues and research perspectives. In Vanden berghe (Ed.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice*(pp.38-58). Cambridge University Press.
- Ryan, R. M. & Deci, E. L. (2001). Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 68-81.
- Savolainen, A. (2001). [School as a work place. Pupils' and personel's perspectives.] Koulu työpaikkana. Työolojen itsearviointi ja kehittämistarpeet oppilaiden ja henkilöstön näkökulmasta. (Doctoral Dissertation, University of Tampere 2001). *Acta Universitatis Tamperensis* 830.
- Seligman, M. E. P. & Csikszentmihalyi, M. (2000). Positive psychology. An introduction. *American Psychologist*, 55(1), 5-14.
- Sheldon, K. M. & King, L. (2001). Why positive psychology is necessary. *American Psychologist*, 56(3), 216-217.

- Silins, H. & Mulford, B. (2002). Schools as learning organisations. The case for system, teacher and student learning. *Journal of Educational Administration*, 40(5), 425-46.
- Soini, T., Pyhältö, K. & Pietarinen, J. (2010). Pedagogical well-being: Reflecting learning and well-being in teachers' work. *Teachers and Teaching: Theory and Practice*, 16(6), 735-751. https://doi.org/10.1080/13540602.2010.517690
- Torsheim, T., Aarø, L. E. & Wold, B. (2001). Sense of Coherence and school-related stress as predictors of subjective health complaints in early adolescence: Interactive, indirect or direct relationships. *Social Science and Medicine*, 53(5), 603-614.
- Van Houtte, M. (2006). Tracking and teacher satisfaction: role of study culture and trust. *The Journal of Educational Research*, 99(4), 247-254.

Public-Private Partnership (PPP) in Indian Higher Education: Opportunities and Challenges

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ABSTRACT

Higher education makes us more skilled, stable and financially secure. Findings of All-India Survey on Higher Education (AISHE) 2020-21 describe that India has 1113 universities (59 % public and 41 % private) with 4.13 crore enrolment of students. Colleges affiliated to these universities are 41600 and 78.3 % of them are private (aided and unaided). This makes India the largest higher education system in the world and also shows the importance of private colleges in India. If we compare AISHE 2020-21 from AISHE 2014-15, then 46 % universities and 20.9 % enrollment has been increased. On the one hand the number of universities, colleges and enrollment has increased but on other hand the budgetary allocation for education as a percentage of total expenditure has dropped over the past seven years,

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from 10.4% to 9.5%, (Ministry of Finance, 2023). It is understood the government has some other priorities. In this context, the usefulness of the private sector and public-private partnership in higher education should be taken into consideration. National Education Policy 2020 is also focused on true philanthropic private and community participation in the education system. The present study tries to find out opportunities and strategies to public private partnership in higher education with highlighting some challenges.

Key words: Public-private partnership, higher education, public sector, private sector, India

Introduction

Education is the most important aspect of any individual's development. It is basic requirement and considered as a fundamental human right. The social, economic, and political development of any country is greatly influenced by its educational system. Higher education has long been known to have a significant impact on a country's prosperity and poverty. Governments all over the world have taken the responsibility of providing education. They also invite private intervention in order to diversify and reach out from a financial and managerial standpoint. The nations having room for better talent development and expansion can anticipate economic fulfillment and advancement. Those with inadequate education will inevitably fall behind in these prospects and will have to go without considerable knowledge and economic advantages.

Higher education has seen drastic changes in recent years not only in its content, subjects, disciplines but also in its models of operation and administration. The development of technology in the last decades also opened different doors of opportunity in higher education. The scenario has totally changed. In India education is provided through both public and private sectors. Both sector setup institutes and offer courses of different disciplines. According to the AISHE 2020-21, India has 1113 universities (59 % public and 41 % private).

As there were many constraints on the opening up of educational institutions for private sectors so the majority of the responsibility for providing education remained with the state until the early 1990s. Central and state governments made high investments in the higher education sector. Last two decades have witnessed increasing participation of the private sector in higher and technical institutions, especially in the professional degree colleges (Shukla, 2018). Now the situation is this, 41600 Colleges are affiliated to Indian universities and 78.3 % of them are private (AISHE 2020-21). In the present scenario the public and private sectors are working separately for education. There is one idea for the public and private sectors to work together to fill the demand-supply gaps for high-quality higher education and make a remarkable impact on the nation's development. This is public-private partnership (PPP). PPP acknowledges the presence of other possibilities outside sole reliance on either the public or the private sector to deliver educational services. Different forms of this thought have emerged as a result of the passage of time and involvement in higher education.

Scenario in Higher Education

Higher Education, any of various types of education given in postsecondary institutions of learning and usually affording, at the end of a course of study, a named degree, diploma, or certificate of higher studies (Britannica, 2022). Previously India was following a 10+2 system in school education, National Education Policy 2020 has restructured it into a 5+3+3+4 system. Higher education starts after completion of this 5+3+3+4 curricular structure.

Public Private Partnership (PPP)

Public-Private partnership, a special type of task fulfillment of administrations, has grown in popularity in recent years in maximum countries (Lobner 2009 & wang at el. 2018). It is collaboration between any government organization and a private sector that is used to construct, run and fund projects, public transit systems and educational institutions. A project's funding through a PPP may enable an earlier completion or can increase the project's potential. Van Ham and Koppenjan

(as cited by Hodge A.G. and Greve C.) saw it as "cooperation between public-private actors in which they jointly develop products and services and share risks, costs and resources which are connected with these products and services." It is seen as an alternative to administration. It is an arrangement between a government / statutory entity / government owned entity on one side and a private sector entity on the other, for the provision of public assets and/or public services, through investments being made and/or management being undertaken by the private sector entity, for a specified period of time, where there is well defined allocation of risk between the private sector and the public entity and the private entity receives performance linked payments that conform (or are benchmarked) to specified and pre-determined performance standards, measurable by the public entity or its representative (Ministry of finance, 2011).

Theories of Public Private Partnership (PPP)

There are several models for proper implementation of PPP. Shukla (2018), describes following models of PPP:

- A. Build Operate and Transfer (BOT): This is the basic and traditional PPP model, where the private sector is tasked with designing, constructing, operating (during the agreed upon period). After that, hand over the facility to the government. National highway projects that National Highways Authority of India (NHAI) contracted works under this PPP form.
- **B.** Build-own-operate (BOO): This is a BOT version, with the distinction that the private sector in this case will retain ownership of the newly constructed facility. On mutually acceptable terms and conditions, the public sector partner consents to "buy" the goods and services delivered by the project.
- C. Build-own-operate-transfer (BOOT): This is also similar to the BOT model. The infrastructure asset is given to the government or to the commercial operator after the agreed upon time period.

- **D.** Build-operate-lease-transfer (BOLT): In this model, the government grants a concession to any private sector so that it may design, develop, own, and lease a facility to the general public after which the facility's ownership will be transferred to the government at the conclusion of the lease period.
- E. Lease develop operate (LDO): In this model, the public sector or the government retains ownership of the newly built infrastructure facility and gets payments under the conditions of a lease with the private promoter. The majority of airport facility development uses this strategy.
- F. Rehabilitate-Operate-Transfer (ROT): In this model, the municipal or state governments provide private promoters a temporary concession to renovate and run a facility. The project is returned to the government or local entities after the decided period.
- G. Design, Build, Finance and Operate (DBFO): In this model, local and state governments permit private promoters to renovate and run a facility for a set amount of time. The project is returned to municipal or state governments after the decided period.

Need of Public Private Partnership (PPP)

Since the structural adjustment period taught the international aid community a lot of valuable lessons, radical privatization approaches in education and other social sectors are not being openly supported (Verger 2012). Many believe that the public sector cannot successfully address the task of expanding education on its own (Verger 2012). In this situation, rather than viewing private providers as a threat to the state, governments should view them as possible partners. In various countries PPP model was adopted and provide good results. Ishawu et al. (2020 p1297) in their study suggested that "PPP can be adopted together with other conventional or traditional approach". A focused PPP model, need-based funding, and incentives can help to enhance girls' education and pull students

from underprivileged areas into the classroom (Rinda & Shah, 2022). Therefore, to improve quality in education, adoption of PPP in higher education is needed. Cicek (2015) highlighted following areas where PPP can be beneficial:

Access: PPPs in higher education can support the requirement for institution capacity expansion in order to fulfill demand caused by the rising student population. This can lower class sizes and broadens access to education.

Quality: PPPs enable governmental organizations to focus more on their main responsibilities, such as policy, planning, and the creation of educational programmes, which raises the standard of their services.

Finance: PPPs aid in fostering sector-wide competition, boosting efficiency and innovation in the provision of education. However, the benefits of choice and competition are not fairly distributed and can lead to worsening disparities between the rich and the poor. Furthermore, poorly written contracts or significant performance failures could expose the government to serious financial and operational risks.

Capacity building and governance: PPPs have a good impact on public sector creativity, knowledge, and competencies, which enhances decision-making by involving all stakeholders. In the event that the related public services are not provided, PPPs may, to some extent, result in a loss of control for the government authorities as well as a loss of accountability and reputation for the government.

Flexibility and innovation: By focusing on the desired outputs and conclusions rather than just the inputs, PPPs enable far greater creativity in the delivery of education. They may also assist governments in getting over onerous employment rules and antiquated government pay scales. However, creating the contract and its corresponding restrictions can be difficult, particularly for bureaucracies that have never used an outsourced, results-based contracting model before.

Sustainability: PPPs may offer consistency and stability in a project in regions where the government is weak politically and where employees are subject to replacement, promotion, and retirement independent of current initiatives. On the other hand, non-government partners might stop participating if the leadership or personnel of their organization changes, and PPPs might be subject to expensive transaction fees.

Opportunities for PPPs

While replying to a question in winter session of 2022 of Loksabha, Indian Education Minister Mr. Dharmendra Pradhan stated that a total of 6,180 posts for Professors, Associate Professors and Assistant Professors are vacant in Central universities out of the total sanctioned posts of 18, 956, as on December 1, 2022. It means close to 33% posts for these are vacant in Central universities. Also according to the Economic Survey 2022-23, the budgetary allocation for education as a percentage of total expenditure has dropped in 2022 from 10.4% to 9.5% in comparison of 2015. If we compare AISHE 2020-21 from 2014-15, the number of 46 % universities and 20.9 % enrollment has been increased. One side number of enrollment and universities is increasing on the other side budget allocation and number of teachers is decreasing, this raises some serious concerns regarding quality of higher education, also proves that government has some other priorities. The National Policy on Education (1968) suggested that spending on Education to be 6% of GDP. After Budget 2023, it is stagnant at 2.9 % (The Economic Times, 2023). In these circumstances, Public Private Partnership can be an option for making education more accessible, flexible, sustainable and innovative. Indian economy is facing some challenges after Corona pandemic and then Russia Ukraine war (The Economic Times 2023). Government is not in a situation to a high investment in Education sector. Public private partnership can be an alternative then; Education sector has higher potentials for PPP. Therefore, there is an urgent need to identify areas, institutes where PPP can be implemented in Education sector. It has the ability to solve a variety of educational issues that are prevalent in developing countries (verger 2012). Government should create a PPP unit under the ministry of education; the unit will provide assistance for PPP projects. Infrastructure is necessary for quality education. However, the other options for financing and providing expensive infrastructure should have been taken into consideration. PPPs, which combine public and private financing, expertise, and efficiency, also offer an alternate method of providing infrastructure services.

Some Challenges for Public Private Partnership (PPP)

In countries outside India PPP has shown some positive results. But in India many aspects are different, for example different ideology of different politicians leading governments. So there are some concerns regarding its implementation. It invites commercial companies, whose ulterior motives often conflict with educational goals in setting up schools and for whom there is no difference between education and, say, the production of cars. PPP in the neo-liberal times provides for no government or any type of social control on education. In fact, it provides for unlimited power to the private sector.It will result in the commercialization and privatization of education using money of tax payers (The Hindu, 2010). Owners of private sector can use PPP for their personal causes. Some PPP model openly gives more liberty to institutions, they are free to fix fee levels and the government has no role with respect to either the fee rates or the expenditure of the schools. This can affect some students who are financially weak. Evaluation of PPP is also a concern, the issue of how to thoroughly and efficiently evaluate the performance of PPP needs to be addressed (Leu et al. 2018). Maximum people of the country do not view the private sector as a good choice. Given the health and infrastructure systems, there has long been faith and trust in government systems and procedures. The path forward does contain a number of open issues that must be weighed against the benefits of the offered approach of PPP.

Conclusion

The government has shown interest in PPP. But there is lot of concerns that needs to be solved for its better implementation.

It is currently difficult to comprehend why the private sector would make substantial financial expenditures in education sector and delve into a risky field because there are no adequate guidelines or a clear path forward. The PPP models cannot be easily implemented in higher education due of the complexity of Indian education. Starting an institution can be quite difficult due to the numerous permits and licenses required. There are the cultural and geographical aspects to take into account. There is need of trust between different stakeholders. Different IIITs constructed after 2016-17 are based on PPP model, an evaluative study on them will describe the actual reality of implementation. Also study related to opinion of different stakeholders, their experiences, and their issues should to conduct to make way forward in the implementation of PPP.

REFERENCES

- Britannica, T. (2022). *Higher education*. Encyclopedia Britannica. Retrieved February 7, 2023 from https://www.britannica.com/topic/higher-education
- Cicek, G. (2015). *Public Private Partnerships in Education*. Baseak White Papers. Retreieved from https://www.baseak.com/en/insights/guides-reports-and-whitepapers/2016/june/27/ppp-in-education
- Hodge, A.G. & Greve, C. (2016). *On Public-Private Partnership Performance: A Contemporary Review*. Public work management and policy, Sage publications. DOI: 10.1177/1087724X16657830
- Ishawu, M., Guangyu C., Adzimah, E.D. & Aminu, A.M. (2020). Achieving value for money in waste management projects: determining the effectiveness of public-private partnership in Ghana. *International Journal of Managing Projects in Business*. 13(6), 1283-1309.
- Leu, H.J., Love, P.E.D., Smith, J., Sing, M.C.P. & Matthews, J. (2018).
 Evaluation of public-Private partnerships: A life cycle Performance
 Prism for ensuring value for money. Environment and Planning
 C: Politics and Space (1-21), Sage Publications. DOI:
 10.1177/2399654417750879

- MHRD (2016). All India Survey on Higher Education 2014-15. Retrieved February 7, 2023, from https://www.education.gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE2014-15
- MHRD (2020). National Education Policy 2020. Retrieved October 22, 2022 fromhttps://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Ministry of Education (n.d.). National Policy on Education 1968. Retrieved February 9, 2023 from https://www.education. gov.in/sites/upload_files/mhrd/files/document-reports/ NPE-1968.pdf
- Ministry of Education (2022). All India Survey on Higher Education 2020-21. Retrieved
- On February 7, 2023 from https://www.education.gov.in/sites/upload_files/mhrd/files/statisticsnew/AISHE%20Report%202020-21.pdf
- Ministry of Finance (n.d.). Economic survey 2022-23. Retrieved February 7, 2023 from https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap01.pdf
- Nair, N. (2020). An Analytical Study of the Impact of Privatization in Higher Education. Jamia Milia Islamia University, New Delhi. Retrieved February 07, 2023 from https://shodhganga.inflibnet.ac.in/handle/10603/332309
- National Educational Policy (2011). Draft for Consultation. Government of India. Retrieved February 07, 2023 from http://www.mcrhrdi.gov.in/87fc/policies/Draftnational ppppolicy.pdf
- Rind, G. & Shah, D. (2022). Public-Private Partnerships in Education: Evaluating the Education Management Organisations Programme in Sindh, Pakistan. 10.30541/v61i2pp.185-212.
- Shah, D. (2018). Role and impact of public private partnerships in higher education space.
- Retrieved February 07, 2023 from https://shodhganga.inflibnet.ac.in/handle/10603/235731
- Shukla, P. D. (2018). Role and impact of public private partnerships in higher education space. Retrieved February 06, 2023 from http://hdl.handle.net/10603/235731

- The Economic Times (2023, February). Budget 2023. Retrieved February 07, 2023 from https://economictimes.indiatimes.com/industry/services/education/budget-2023-education-gets-highest-ever-allocation-share-in-gdp-remains-stagnant-at-2-9/articleshow/97534802.cms? from=mdr
- The Economic Times (2023, February). India Economy to grow faster once global shocks of Pandemic, Russia-Ukraine war fade, says CEA. Retrieved February 07, 2023 from https://economictimes.indiatimes.com/news/newsblogs/economic-survey-2023-live-news-and-latest-updates/liveblog/msid-97469145,curpg-2.cms
- The Hindu (2010, May). Public-private partnership in education. Retrieved February 07, 2023 from https://www.thehindu.com/opinion/lead/Public-private-partnership-in-education/article16303142.ece
- Verger, A. (2011). Framing and selling global education policy: the promotion of public-private partnerships for education in low-income contexts. *Journal of Education Policy*, 27(1), 109-130

राष्ट्रीय शिक्षा नीति 2020 में उच्च शिक्षा के महत्त्व का अध्ययन

-सुनील कुमार दूबे¹

सारांश

स्वतंत्रता के बाद भारत शिक्षा के प्रत्येक पहलुओं को ध्यान में रख कर नीतियों का निर्माण कर रहा था। भारतज्ज्य शिक्षा में प्रजातान्त्रिक मूल्यों, सांस्कृतिक धरोहर, सभ्यता और संस्कृति को शामिल करते हुए शिक्षा नीतियों का निर्माण करना चाहता था। राष्ट्रीय शिक्षा नीति 1986, ड्राफ्ट 1979 ने जज्ज शिक्षा के लिए गुणवत्तापूर्ण कार्य किये। वर्तमान सरकार 2014 से निरन्तर शिक्षा नीति पर विस्तार पूर्वक और समाज के सभी प्रबुद्ध वर्गों के संसर्ग में कार्य कर रही थी। यह विस्तृत राष्ट्रयापी चर्चा लगभग परम्परा के आलोक में निर्मित है। राष्ट्रीय शिक्षा नीति 2020 ने जज्जतर शैक्षणिक पारिस्थितिकी तंत्र के विखण्डन को स्वीकार किया है। समकालीन भारत में जज्ज शिक्षा के क्षेत्र में विद्यमान समस्याओं तथा चुनौतियों को रेखांकित करते हुए सीमित शिक्षण एवं संस्थागत स्वायत्ता, जज्जतर शिक्षा संस्थानों में सुशासन तथा नेतृत्व क्षमता का अभाव, विषयों का कठोर विभाजन, स्नातक स्तर पर विशेषज्ञता प्राप्ति

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की आतुरता, अप्रभावी विनियामक प्रणाली, शोध पर अपर्याप्त बल, पारदर्शी और प्रतिस्पर्धी समीक्षा शोध निधियों का अभाव, संस्थागत शिक्षा प्रशासकों की प्रगति हेतु अपर्याप्त तन्त्र, आदि प्रमुख समस्याओं को पहचानती है और उन्हें सहजता से स्वीकार करती है। साथ ही आनेवाली शताब्दी की अपेक्षाओं को देखते हुए भारतीय उच्चतर शिक्षा व्यवस्था हेतु एक नया और भविष्योन्मुखी दृष्टिकोण प्रस्तुत करती है (राष्ट्रीय शिक्षा नीति, 2020)। इस आलेख द्वारा इस पर प्रकाश डाला गया है कि उच्च शिक्षा में राष्ट्रीय शिक्षा नीति 2020 किस प्रकार से शिक्षा की दिशा और दशा को तय करेगी।

मुख्य शब्दः गुणवत्तापूर्ण शिक्षा, उच्च शिक्षा, राष्ट्रीय शिक्षा नीति 2020

प्रस्तावना

शिक्षा निरंतर जीवन पर्यंत चलने वाली एक प्रक्रिया है। देश पर विभिन्न समय से विभिन्न शासकों द्वारा चलाई गयी शिक्षा प्रणाली परिवर्तित हुई क्योंकि समयतथा आवश्यकतानुसार शिक्षा की समस्याओं का समाधान खोजने के लिए अनेक समितियों, आयोगों का गठन किया गया। स्वतंत्र भारत में डॉ. सर्वपल्ली राधाकृष्णन की अध्यक्षता में विश्वविद्यालय शिक्षा आयोग (1948–49), दौलत सिंह कोठारी की अध्यक्षता में शिक्षा आयोग (1964-66) का गठन होने के बाद भारत सरकार ने शिक्षा के पुनर्निर्माण की आवश्यकता को महसूस करते हुए राष्ट्रीय शिक्षा नीति (1968) का गठन किया। भारत की राजनैतिक स्थिति बदलने के साथ शिक्षा की नीतियां भी प्रभावित हुई। भारत सरकार ने शिक्षा में आमूलचूल परिवर्तन के लिए राष्ट्रीय शिक्षा नीति का गठन किया गया तभी इसी समय 1979 में सरकार बदल गयी और यह शिक्षा नीति केवल कागजों पर ही रह गयी। राष्ट्रीय शिक्षा नीति 1986 में यह प्रावधान किया गया कि शिक्षा में राष्ट्रीय शिक्षा प्रणाली को अपनाया जाये. शैक्षिक पाठ्यक्रमों के अभिनवीनीकरण करने के साथ अध्यापक शिक्षा में अवसरों की समान उपलब्धता सुनिश्चित किया जाये, स्वायत्ता को बढ़ाया जाये, सुधार करते हुए उपाधि को नौकरी से विलग किया जाये और शिक्षा में तकनीकीकरण को अपनाया जाये। राष्ट्रीय शिक्षा नीति 1986 की समीक्षा की गई तथा संशोधित प्रारूप 7 मई 1992 को राष्ट्रीय शिक्षा नीति 2020 में उच्च शिक्षा के महत्त्व का अध्ययन 163 संसद के दोनों सदनों में रखे गए तथा राष्ट्रीय शिक्षा नीति 1986 में संशोधन करते हुए कार्य योजना बनाकर लागू किया गया।

राष्ट्रीय शिक्षा नीति 2020: उच्च शिक्षा

उच्चतर शिक्षा मनुष्य और साथ ही सामाजिक कल्याण के विकास में महत्त्वपूर्ण भूमिका निभाती है हमारे संविधान में भारत को एक लोकतांत्रिक एवं सामाजिक रूप से सचेत, संस्कारी और मानवीय राष्ट्र जहां सभी के लिए न्याय, स्वतंत्रता, समानता और भाईचारे का भाव हो एक ऐसे राष्ट्र के रूप में विकसित करने की परिकल्पना की गई है। एक राष्ट्र के आर्थिक विकास और आजीविकाओं को स्थायित्व देने में भी उच्चतर शिक्षा एक महत्त्वपूर्ण भूमिका निभाती है। जैसे-जैसे भारत ज्ञान आधारित अर्थव्यवस्था और समाज की ओर बढ़ता जा रहा है वैसे-वैसे भारतीय युवा उच्चतर शिक्षा की ओर बढ़ रहे हैं। 21वीं सदी की आवश्यकता को देखते हुए गुणवत्तापूर्ण उच्चतर शिक्षा का उद्देश्य चिंतनशील बहुमुखी प्रतिभा वाले रचनात्मक व्यक्तियों का विकास करना होना चाहिए। एक व्यक्ति को एक या एक से अधिक क्षेत्रों में ज्ञान के स्तर पर अध्ययन करने में सक्षम बनाये और साथ ही चरित्रवान, नैतिक आचरण करने वाला, संवैधानिक मूल्यों, बौद्धिक जिज्ञासा, वैज्ञानिक स्वभाव, रचनात्मक, सामाजिक विज्ञान, कला, मानविकी, भाषा साथ ही व्यवसायिक तकनीकी और व्यवसायिक विषयों सहित विभिन्न विषयों में क्षमताओं को विकसित करती है। उच्चतरशिक्षा को व्यक्तिगत उपलब्धि और ज्ञान, सार्वजनिक सहभागिता और समाज में योगदान देनेयोग्य सक्षम करना चाहिए। इसे विद्यार्थियों को अधिक सार्थक और संतोषजनक जीवनयापन में और कार्य भूमिकाओं के लिए तैयार करना चाहिए साथ ही आर्थिक स्वतंत्रता मेंभी सक्षम बनाना चाहिए।

भारतीय उच्च शिक्षा आयोग

राष्ट्रीय शिक्षा नीति केद्वारा देश भर के उच्च शिक्षा संस्थानों के लिये एक एकल नियामक अर्थात् भारतीय उच्च शिक्षा परिषद (HECI) का गठन किया जायेगा, जिसमें विभिन्न भूमिकाओं को पूरा करने हेतु कई क्षेत्रों में कार्य किया जायेगा। भारतीय उच्च शिक्षा आयोग चिकित्सा एवं कानूनी

शिक्षा को छोड़कर पूरे उच्च शिक्षा क्षेत्र के लिये एक एकल निकाय के रूप में कार्य करेगा।

भारतीय उच्च शिक्षा आयोग के कार्यों को प्रभावी निष्पादन हेतु चार निकाय बनाये गए है जो निम्नलिखित है:

- राष्ट्रीय उच्चतर शिक्षा नियामकीय परिषद (National Higher Education Regulatory Council-NHERC): यह शिक्षक शिक्षा सहित उच्च शिक्षा के क्षेत्र के लिये एक नियामक का कार्य करेगा।
- सामान्य शिक्षा परिषद (General Education Council-GEC): यह उच्च शिक्षा कार्यक्रमों के लिये अपेक्षित सीखने के परिणामों का ढाँचा तैयार करेगा अर्थात् उनके मानक निर्धारण का कार्य करेगा।
- राष्ट्रीय प्रत्यायन परिषद (National Assessment and Accreditation Council-NAAC): यह संस्थानों के प्रत्यायन का कार्य करेगा जो मुख्य रूप से बुनियादी मानदंडों, सार्वजनिक स्वप्रकटीकरण— सुशासन और परिणामों पर आधारित होगा।
- उच्चतर शिक्षा अनुदान परिषद (Higher Education Grants Council-HGFC): यह निकाय कॉलेजों एवं विश्वविद्यालयों के लिये वित्तपोषण का कार्य करेगा।

समग्रता एवं बहुविषयक

भारत कोसमग्र और बहुविषयक साहित्य में क्षेत्रों में तक्षशिला और नालंदा जैसे विश्वविद्यालयों से सीखने की लम्बी परम्परा है। बाणभट्ट की कादम्बरी जैसी प्राचीन भारतीय साहित्यिक कृतियों ने 64 कलाओं या कलाओं के ज्ञान के रूप में एक अच्छी शिक्षा का वर्णन किया है। गणित, विज्ञान, व्यावसायिक विषयों और सॉफ्ट स्किल्स सहित रचनात्मक मानव प्रयासों की सभी शाखाओं को भारतीय कलामाना जाना चाहिए। "एक समग्र और बहु—विषयक शिक्षा का उद्देश्य मानव की सभी क्षमताओं—बौद्धिक, सौंदर्यात्मक, सामाजिक, शारीरिक, भावनात्मक और नैतिक को एकीकृत तरीके से विकसित करना होता है। इस तरह की समग्र शिक्षा, दीर्घावधि में,

समता एवं समावेश

शिक्षा में समानता का अर्थ है कि सभी विद्यार्थियों को शिक्षा की समान पहुँच तथा जाति, वर्ग, प्रदेश, धर्म, लिंग आदि के भेदभाव के बिना समान अवसरों की प्राप्ति हो। समान अवसरों का उचित तथा पारदर्शी होना, स्वीकार्य भाषा का उपयोग, तथा लोगों का आदर करना होना चाहिए। यह दृष्टिकोण, अभियान तथा मूल्यों का आधार होना चाहिए। समावेश वह प्रक्रिया है जो प्रतिभाशाली बालकों को प्रत्येक दशा में सामान्य शिक्षा उनकी कक्षा में उपलब्ध करायी जाती है। समावेशन पृथक्करण के विपरीत है। पृथक्करण वह प्रक्रिया है जिसमें समाज का विशिष्ट समूह अलग से पहचाना जाता है तथा धीरे—धीरे सामाजिक तथा व्यक्तिगत दूरी उस समूह की तथा समाज की बढ़ती जाती है।

अध्यापक शिक्षा

उच्चतर शिक्षण संस्थाओं में अगली पीढ़ी को शिक्षा देने वाले शिक्षकों की एक टीम के निर्माण में अध्यापक शिक्षा की भूमिका महत्त्वपूर्ण हैं। शिक्षकों को तैयार करना एक ऐसी प्रक्रिया है, जिसके लिए बहुत संयुक्त दृष्टिकोण और ज्ञान की आवश्यकता के साथ—साथ बेहतरीन तथ्यों के निर्देशन में मान्यताओं और मूल्यों के निर्माण के साथ—साथ उनके अभ्यास की भी आवश्यकता होती है। यह सुनिश्चित करना जरुरी होता है की अध्यापक शिक्षा और शिक्षण प्रक्रियाओं से सम्बंधित अध्ययन प्रगति के साथ भारतीय मूल्यों, भाषाओं, ज्ञान, लोकाचार और परम्पराओं, जनजातीय परम्पराओं के प्रति जागरूक रहे।

अध्यापक शिक्षा के लिए बहुविषयक इनपुट के साथ उच्चतर गुणवत्ता युक्त विषय वस्त् और शैक्षणिक प्रक्रियाओं की आवश्यकता होती है। अतः इसे ध्यान में रखते हुए सभी अध्यापक शिक्षा कार्यक्रमों को समग्र बहुविषयक संस्थानों में ही आयोजित किया जाना चाहिए। इस के लिए सभी बहुविषयक सार्वजानिक महाविद्यालय का लक्ष्य अपने यहाँ उत्कृष्टशिक्षा विभागों की स्थापना और विकास करना है जो कि शिक्षा में अत्याधृनिक अनुसंधानों को बढ़ावा देने के साथ–साथ मनोवैज्ञानिक, दर्शन शास्त्र, समाजशास्त्र, तंत्रिका विज्ञान, भारतीय भाषाओं, कला, संगीत और साहित्य के साथ-साथविज्ञान और गणित जैसे अन्य विशिष्ट विषयों से संबंधित विभागों के सहयोग से भविष्य के शिक्षकों को शिक्षित करने के लिए बी.एड. कार्यक्रम भी संचालित किया जाएगा। इसके साथ ही साथ वर्ष 2030 तक सभी एकल शिक्षक शिक्षा संस्थानों को बहु विषयक संस्थानों के रूप में बदलने की आवश्यकता होगी, क्योंकि उन्हें चार वर्षीय एकीकृत शिक्षक प्रशिक्षण कार्यक्रमों को संचालित करना होगा। "शिक्षा विभाग में संकाय सदस्यों की प्रोफाइल में विविधता होना एक आवश्यक लक्ष्य है। हर किसी के लिए पी.एच.डी. धारक होना आवश्यक नहीं होगा लेकिन शोध के क्षेत्र में शिक्षण के अनुभाव को महत्ता प्रदान की जाएगी। सीधे–सीधे विद्यालय शिक्षा से जुड़ने वाले सामाजिक विज्ञान के क्षेत्रों में जैसे– मानवविज्ञान, बाल विकास, भाषा, विज्ञान, समाजशास्त्र, दर्शन, अर्थशास्त्र और राजनीतिक विज्ञान के साथ ही साथ विज्ञान शिक्षा, गणित, शिक्षा, सामाजिक विज्ञान शिक्षा और भाषा शिक्षा जैसे कार्यक्रमों से संबंधित विषयों में प्रशिक्षण प्राप्त संकाय सदस्यों को शिक्षक शिक्षा संस्थानों में आकर्षित और नियुक्त करने का प्रावधान है, जिससे शिक्षकों की बह्विषयी शिक्षा को और उनकी अवधारणात्मक विकास को मजबूती प्रदान हो सके" (Gupta & Choubey,2021)। कॉलेज और राष्ट्रीय शिक्षा नीति 2020 में उच्च शिक्षा के महत्त्व का अध्ययन 167 विश्वविद्यालयों में सेवारत शिक्षकों के लिए सतत व्यवसायिक विकास प्रशिक्षण मौजूदा संस्थागत व्यवस्था और जारी पहलुओं के माध्यम से प्रशिक्षित किया जाना राष्ट्रीय शिक्षा नीति में जारी रहेगा।

व्यावसायिक शिक्षा की आंकलन

देश में बढ़ती बेरोजगारी, युवाओं में जन्मती दुष्प्रवृत्तियाँ तथा उनका असामाजिक कृत्यों की ओर झुकाव देश को अराजकता की ओर भी धकेल रहा है। इसलिए अनिवार्य है कि हमारी शिक्षा का व्यवसाय के साथ सामंजस्य तथा संतुलन हो। व्यावसायिक शिक्षा व्यक्ति को समाज की वास्तविकता से परिचित कराएगी एवं समाज के विकास में व्यक्ति की भूमिका का ज्ञान कराएगी। व्यावसायिक शिक्षा रोजगार उत्पन्न नहीं करेगी, वह तो व्यक्ति को रोजगार प्राप्त करने अथवा स्वतंत्र रूप से अपनी जीविका अर्जित कराने में सहायक होगी। "व्यवसायिक शिक्षा, ज्ञान और अनुभव से परिपूर्ण प्रशिक्षित प्रतिभा का सूजन करने का एक स्वच्छंद, स्थिर एवं अपरंपरागत माध्यम है। प्रशिक्षित छात्र इन कोर्सो को करके जमीनी स्तर पर हुनरमंद और काबिल बनते है, और अपना अनुभव और काबिलियत अपनी रोजमर्रा की जिन्दगी में भी दिखाते है। व्यावसायिक शिक्षा छात्रों को व्यवसाय चुनने एवं व्यवसाय संबंधित योग्यता प्राप्त कराने का अवसर प्रदान करती हैं" (कोठारीआयोग, 1964–66)। यह बेहद कम समय और खर्चे में छात्रो को कौशल प्रदान कर उनका जीवन सवार रही है। अपने समकक्ष छात्रों की तुलना में वोकेशनल शिक्षा प्राप्त कर एक छात्र दूसरों की तुलना में पहले अपना करियर सैटल कर सकता है। जिन्दगी एक रेस की भाँति ही होता है, इसमे उसी का घोड़ा जीतता है, जिसकी लगाम एक कुशल, निप्ण और अनुभवी जॉकी के हाथोंमें होती है। जिस देश मे जितने ज्यादा स्कील्ड लोग होंगे, वह देश उतनी ही तेजी से तरक्की करता है।

नवीन राष्ट्रीय अनुसन्धान फाउंडेशन के माध्यम से अनुसंधान (NRF)

यह राष्ट्रीय अनुसंधान फाउंडेशन मुख्य रूप से ऐसे सभी शैक्षणिक संस्थानों, विशेषकर विश्वविद्यालयों और कॉलेजों में अनुसंधान को बढ़ावा देने, विकसित करने और सुविधा प्रदान करने का लक्ष्य रखेगा, जहां अनुसंधान क्षमता अभी प्रारंभिक अवस्था में हो तथा केंद्र सरकार ने देश में अनुसंधान पारिस्थितिक तंत्र को मजबूत करने केलिए राष्ट्रीय अनुसंधान का प्रस्ताव प्रस्तुत किया (नेशनल रिसर्च इकोसिस्टम)।

उच्चतर शिक्षा संस्थानों के लिए प्रभावी शासन और नेतृत्व

यह प्रभावी प्रशासन और नेतृत्व है जो उच्च शिक्षा संस्थानों में उत्कृष्टता और नवाचार की संस्कृति के निर्माण में सक्षम बनाता है। भारत सहित विश्व स्तर पर सभी विश्व स्तरीय संस्थानों की आम विशेषता वास्तव में संस्थागत नेताओं की मजबूत स्वशासन और उत्कृष्ट योग्यता आधारित नियुक्तियों का अस्तित्व है। "श्रेणीबद्ध मान्यता और श्रेणीबद्ध स्वायत्तता की एक उपयुक्त प्रणाली के माध्यम से 15 वर्षों की अवधि में चरणबद्ध तरीके सेभारत के सभी HEI का स्वतंत्र स्वशासी संस्थान बनना होगा। उच्चतम गुणवत्ता का नेतृत्व सुनिश्चित करने और उत्कृष्टता की संस्थागत संस्कृति को बढावा देने के लिए सभी HEI में उपाय किए गए है" (कल्याणी, 2020)। इस तरह के कदम के लिए तैयार संस्था को उपयुक्त मान्यता प्राप्त होने पर, बोर्ड ऑफ गवर्नर्स (BoG) को उच्च योग्य, सक्षम और समर्पित व्यक्तियों के समूह से मिलकर स्थापित किया जाएगा, जिनमें सिद्ध क्षमताएं और प्रतिबद्धता की एक मजबूत भावना होगी। किसी संस्था का ठवळ किसी भी बाहरी हस्तक्षेप से मुक्त संस्था को संचालित करने के लिए सशक्त होगा, संस्था के प्रमुख सभी नियुक्तियाँ करेगाऔर शासन के बारे में सभी निर्णय लेगा। ऐसे ओवररचिंग कानून होंगे जो पहले के अन्य कानूनों के किसी भी उल्लंघनकारी प्रावधानों को उलट देंगे और संविधान, नियुक्ति, कामकाज के नियमोंऔर विनियमो, BoG की भूमिकाओं और ज़िम्मेदारियों को प्रदान करेंगे।

उपसंहार

व्यवस्थागत, लचीलापन अग्रसारित करती है तथा अनुसंधान को केन्द्र में लाती है। वृहद संस्थागत संरचनात्मक रूपान्तरण करती है। बहुविषयक तथा अन्तः अनुशासनात्मकता को अभिवृद्ध करती है। वित्तीय क्षमता का निर्माण करती है। भारतीय भाषाओं का विलुप्त सम्मान एवं उपयुक्त स्थान

संदर्भ ग्रन्थसूची

- कलवानी, पी. (2020). एन इम्पिरिकल स्टडी ऑन राष्ट्रीय शिक्षा नीति विथ स्पेशल रिफरेन्सः 2020. जनरल ऑफ मैनेजमेंट इंजिनयरिंग एंड इनफार्मेशन, 7(5), 1–17.
- गुप्ता, एल.बी. (2021). हायर एजुकेशन इंस्टीट्यूट सम गाइडलाइन फॉर ओब्टिंग एंड सस्टिंग आटोनोमी इन द कॉन्टेक्स्ट ऑफ़ नेशनल एजुकेशन पालिसी 2020. हायर एजुकेशन, 9(1).
- गुप्ता, पी.एस. (2015). भारतीय शिक्षा का इतिहासः विकास एवं समस्याएं. शारदा पुस्तक भवन.
- भारत सरकार (1986).राष्ट्रीय शिक्षा नीति 1986. मानव संसाधन विकास मंत्रालय.
- भारत सरकार (2020). राष्ट्रीय शिक्षा नीति 2020. मानव संसाधन विकास मंत्रालय. Retrieved from https://www-ugc-ac-in/

A Drastic Growth of Higher Education in India - 21st Century

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ABSTRACT

Higher education facilities in India have grown exponentially over the past half-century. In terms of the number of higher educational institutions, student enrollment, variety of programs, and courses offered. At present Indian higher education sector depicts confusing and complex nature of positivity and negativity. The socio-historical journey of higher education in India added a newer dimension during the Medieval period in the form of the Maktab-Madarasa system or the Muslim system of education, which grew throughout ancient India. Indian higher education systems evolve and diversify, society is becoming more concerned about learning outcomes, public evaluations, and international rankings of higher education institutions. This paper investigates the regulations of higher education, higher educational institutions, the recent trends, the development of enrollment from past decades, the Gross Enrollment Ratio, the Gender Parity Index, Equitable and Inclusive access.

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Correlations tend to exaggerate research, and research performance serves as a leading indicator of institutional value. Higher education in India will be constrained by a single regulatory body, in accordance with the National Education Policy (NEP) 2020. The Higher Education Commission of India (HECI) will be a regulatory authority that will deal with various aspects of higher education through four vertical regulating bodies.

Keywords: Higher education, Socio-history, Inclusive, Equity, and Gender parity.

Introduction

Higher education which means post-secondary education or university education is an optional final step of formal education in India that occurs after completing higher secondary education. Usually in India higher education is possessed to the completion of 12 years of schooling. In terms of the student population, India has the world's third-largest higher education system, next to China and the United States of America. India will be one of the most important educational hubs in the future (Sheikh, 2017). Since independence, India's Higher Education sector has seen a tremendous increase in the number of Universities/University level Institutions & Colleges. The Right to Education Act 2009 which enables free and compulsory education for all children in the age group of 6 to 14 years resulted in a revolution in the Indian education system, with statistics revealing school enrollment from the past decades. Higher education may be general, Vocational, Professional, or technical in the end. Despite a number of obstacles, the Indian higher education system is rapidly expanding, and there is no reason to believe that these obstacles cannot be overcome. With the help of trimming learning tools, a country like India can easily overcome the difficulties and hopes to bring about a dramatic transformation in the country's higher education. Moreover, by using advanced digital teaching and learning tools used to impart knowledge, our country can quickly rise to become one of the world's most developed.

Types of Higher Education Institutions in India

There are three types of higher education institutions as

- University Universities are higher education institutions to provide degrees by a Parliament act or a State Legislature.
- Colleges that are not authorized to generate to provide degrees on their own but ratherprovide degrees by affiliated/recognized universities.
- Stand-alone institutions which are not affiliated with any University but are recognized by various Councils or Ministries, which are not authorized to provide degree programs and thus run Diploma programs.

Objectives

- To Highlight various policies and commission reports to promote higher education
- To identify higher education institutions that have grown rapidly over the last decade
- To frame out Regulations of higher education
- To investigate recent trends in higher education
- To highlight the growth of Gross enrollment ratio and Gender parity in higher education
- To frame out inclusion and equal access in higher education

Several commission reports proposed to make changes in higher education as follows

Commissions/ Policies	Recommendations to Boost Higher Education
	It was the first commission appointed in Indian
	Independence to report on the status of Indian higher
Radhakrishnan	education that recommended improvements,
commission (1948)	standards, and extensions that would be desirable to
	meet the country's present and further needs. Based
	on this report UGC was set up in 1953 to regulate
	higher education standards, and it became a statutory
	body in 1956 by the act of parliament.

(Contd...)

Commissions/	Recommendations to Boost
Policies	Higher Education
	The commission had developed a long-term higher
Kothari commission	education enrollment strategy. Suggested spending
(1964)	6% of annual income on education. Set in motion the
	National Policy on Education in 1968
National Education policies 1986 and Program of Action 1992	There is a special emphasis on eliminating disparities and equalizing educational opportunities. The revised policy recommends the formation of an autonomous commission to enhance and guide higher education, Open Universities, and distance learning. The All-India Council for Technical Education (AICTE) is in charge of managing technical education development.
New Education policy 20 20	The NEP-2020's major recommendations for higher education include increasing GER from 26.3% to 50% by 2035 and establishing a single monitoring system for higher education. Increasing youth and adult literacy to 100%. Multiple entry and exit in higher education will combat and balance the halt in higher education commercialization.

Regulations of Higher Education

National Education Policy (NEP) 2020 stated that Higher Education in India will be governed by a single regulatory body which is the Higher Education Commission of India (HECI), The Higher Education Council of India (HECI) would be divided into four verticals to fulfill various functions.

- The National Higher Education Regulatory Council (NHERC), this council serving as the commonsinglepoint regulator for higher education excluding medical and legal education.
- The National Accreditation Council, a meta-accrediting bodywill be HECI's second vertical. Institutional accreditation is usually based on basic norms and regulations, public self-disclosure, good governance, and substantial outcomes. It will be carried out by institutions supervised and overseen by NAC.
- The Higher Education Grants Council (HEGC), this council will fund and finance to colleges and universities.

 The General Education Council (GEC), this council frames expected learning outcomes for higher educational programs also known as "graduate attributes".

All higher education institutions in India aim to become independent and self-governing institutions by the Board of Governors.

Higher Educational Institution

During the 2020-21 academic year, 1113 universities were mentioned on the AISHE Portal. 235 resided in the Central Government, 422 in the States, 10 were Government Aided Deemed Universities, and 446 were privately operated (Report, 2022).

There are 43796 Colleges registered under AISHE belonging to 314 Universities, and the majority of colleges only offer Undergraduate programs. Only 2.9% of colleges offer Ph.D. programs, while 55.2% offer Post Graduate Level programs. (Report, 2022).

Colleges S. No Academic Year Universities 2012-13 35525 1 667 2 2013-14 723 36634 3 2014-15 760 38498 799 39071 4 2015-16 2016-17 5 864 40026 6 2017-18 903 39050 993 2018-19 39931 2019-20 1043 42343 8 9 2020-21 1113 43796

Table-1: Number of Universities and Colleges

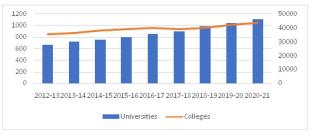


Fig-1: Number of University and College from the Past Decade

Only affiliated and constituent institutions of the Central and State Universities were counted as colleges. Colleges do not includeunits of deemed/private universities, off-campus centers, or recognized centers.

Recent Trends in Higher Education

The influence of new-age pedagogy, technological advancement, and the rapidly changing statuses of students and teachers, the education system is dynamic in nature. The initiation of the Covid pandemic, as well as the education sector's adaptability in recovery from the chaos caused by institution closures, have only accelerated this change. In 2022, the infrastructure not only returned to relative normalcy but also made significant strides toward what could be characterized as a paradigm shift in education. The top trends in the coming year will be certification training courses, edtech expansion, gaining skills workplace skills and knowledge, and the rise of metaverse learning and growth alongside gamification. However, as millennials and young professionals seek to update their skills and knowledge and learn in a more efficient, effective, and time-consuming manner, 'Nanolearning' is set to be the next greatest change. Artificial Intelligence, Virtual Reality, and Augmented Reality have already paved their way into higher education, bringing distance learning closer to the in-person learning experience.

- Higher Education Diversity Students and faculty are becoming more diverse.
- Mental Health Education
- Filling the Skill Gaps by innovative practices
- The Evolution of Massive Open Online Courses (MOOCs)
- International Student Enrollment
- The Increasing Demand for Alternative Funding Sources
- A New Route for Fundraising Campaigns

The modifications in higher education show tangible advantages. Emerging technologies, such as virtual reality have

simplified learning and made it readily available to all learners irrespective of their location. Similarly, Artificial Intelligence has enabled establishments to give personalized learning to assist learners in acquiring the optimal combination of skills. All of these developments explain why higher education endeavors such as an online master's degree in education technology are gaining attraction, in order to control all of these technologies and make them meaningful components of modern education.

Apart from the technologies, more investigation is required to determine the curriculum to work best for prospective learners. The higher education authority must lead the government or nodal agencies to resolve problems that are resulting decrease in the number of foreign students.

GER and Gender Parity in Higher Education

The estimated total enrollment in higher education institutions is 4,13,80,713, with universities and their constituent units accounting for 90,84,095 students, colleges accounting for 2,95,40,392 students, and stand-alone institutions accounting for 22,66,516 students. Gross Enrolment Ratio (GER) in Higher Education, calculated using population projections from the 2011 Census for the 18-23 age group(All India Survey on Higher Education 2020-21, 2022).

S. No	Academic year	Over all %	SC%	ST %
1	2012-13	21.5	16	11.1
2	2013-14	23	17.1	11.3
3	2014-15	24.3	19.1	13.7
4	2015-16	24.5	19.9	14.2
5	2016-17	25.2	21.1	15.4
6	2017-18	25.8	21.8	15.9
7	2018-19	26.3	23	17.2
8	2019-20	27.1	23.4	18
9	2020-21	27.3	23.7	18.9

Table-2: GER in Higher Education

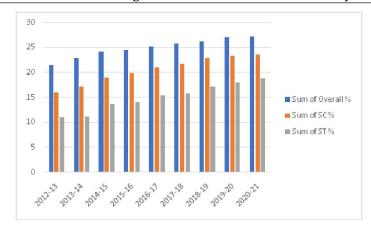


Fig-2: Gross Enrollment Ration

Gender Parity Index for All Categories, SCs, and STs (GPI). Female participation in higher education is 105 per 100 males across all categories, with Scheduled Casts (SCs) and Scheduled Tribes (STs) having 107 and 102, respectively.

Inclusion and Equal Access to Higher Education

A growing higher education pattern to a rising participation rate is more inclusive and equitable by definition than elite higher education and it is qualitatively different (Marginson, 2016). In contrast, the broadening college and university system provides a stratified structure of possibilities, with a structure of power in organizational prestige and subject of study, which defines earnings and social outcomes. This entails the levels of societal involvement and the role of societal inclusion in higher education which is the world'sbiggest higher education with approximately 3.74 crore students and a gross enrollment ratio of 26.3% (MHRD, 2019). In the past few decades, India's higher education has developed from a prestigious stage to a massification stage (N. V. Varghese, 2019)

Equal participation in higher education by a variety of socioeconomic groups is an important aspect of broadening access.It could be argued that in the modern scenario, the misallocation of opportunities for human capital development is a major source of disparities (N. V. Varghese, 2019). The policy in higher education was dominated by three major factors namely, inherited merit, equality of rights, and equality of opportunity (Yossi Shavit, 2010). The movement towards equal opportunity brings to light the differences in the structure of available society, which relies not only on lower entry hurdles but also on broadening talent from all groups of people. The notion of equity as fairness implies that access to higher education and achievement of individual educational value is unaffected by group membership such as gender, socioeconomic status, place of residence, or disability. If the student composition in higher education institutions at each level takes into account the social diversity of the learners is fairness achieved (Marginson, 2016).

Particular characteristics of exclusions are distinct ormore intense in higher education, which includes a lack of knowledge, and opportunities in higher education. The cost of pursuing higher education, financial constraints, admission processes, geographical and language barriers, and the poor employability potential of many programs. The following implementation could meet more prosperous inclusion in higher education(National Education Policy, 2020).

- Making admissions processes more inclusive
- State higher targets of GER for SEDGs
- Enhancing high-quality HEIs in aspirational districts and Special Education Zones containing a maximum of SEDGs
- Making curriculum more inclusive
- Increasing employability potential of higher education programs
- Development of tools and technology for better participation and effective learning.

Conclusion

The new phase of internalization of Indian institutions, as envisaged in the National Education Policy 2020, is bringing in

a paradigm shift in higher education. From national education to global education and from teacher-centric learning to student-centric learning. These changes in higher education seek new demands and new challenges in the established higher education system of our country. Higher education enables students' broader perspective of the world and also teaches them to think more critically and dynamic. All India Survey on Higher Education 2015-16make sound decisions. Students can learn to live within the law, engage in political activities, debate ideas, and enhance the quality of their own lives through higher education. This contributes to ensuring that society continues to evolve and progress and that democracy remains an important part of daily life.

REFERENCES

- Ministry of Human Resource Development (2013). *All India Survey on Higher Education* 2012-13. Deprtment of Higher Education.
- Ministry of Human Resource Development (2014). *All India Survey on Higher Education* 2013-14. Deprtment of Higher Education.
- Ministry of Human Resource Development (2015). *All India Survey on Higher Education* 2014-15. Depresent of Higher Education.
- Ministry of Human Resource Development (2016). *All India Survey on Higher Education* 2015-16. Deprtment of Higher Education.
- Ministry of Human Resource Developmen (2017). *All India Survey on Higher Education* 2016-17. Depresent of Higher Education.
- Ministry of Human Resource Development (2018). *All India Survey on Higher Education* 2017-18. Depresent of Higher Education.
- Ministry of Human Resource Development (2019). *All India Survey on Higher Education 2018-19*. Deprtment of Higher Education.
- Ministry of Human Resource Development (2020). *All India Survey on Higher Education 2019-20*. Department of Higher Education.
- Ministry of Human Resource Development (2022). *All India Survey on Higher Education* 2020-21. Department of Higher Education.
- Marginson, S. (2016). *The worldwide trend to high participation higher education: dynamics of social stratification in inclusive systems.* Springer. doi:https://doi.org/10.1007/s10734-016-0016-x

- Ministry of Human Resource Development (2019). *Higher Education Statistics in India*. New Delhi.
- Shavit, R. A. (2010). *Stratification in Higher Education: A Comparitive Study*. Stanford University Press.
- Sheikh, Y. A. (2017). Higher Education in India: Challenges and Opportunities. *Journal of Education and Practice*, 8(1), 39-42.
- Varghese, N. S. (2019). *Equity Inclusion in Higher Education India*. New Delhi: Centre for Policy Research in Higher Education.

Tourism Education System in India - Dynamics for Past, Present and Future

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ABSTRACT

According to the World University Rankings 2023, India is ranked 6th in the list of countries that have made it to the Times Higher Education (THE) ranking. This became possible because governments and institutions of India have taken several steps to improve education in India from the beginning to the present-day education system has evolved; however, many issues still need to be addressed. Evolved during the early 1990s, tourism education in India has grown brick by brick from the nascent stage. The diversities in the curriculum and teaching-learning practices can be felt from the fact that the program is being run at secondary schools, graduation, post-graduation, and at doctoral research. The present article provides

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an overview of the future dynamics of the new approaches to tourism education in the Indian education system from historical and current perspectives. There are centers where tourism education is taught as a professional degree while in others, it is taught as a social science subject. Institutions offering tourism programs also vary in size and status. Some institutions have been regular in terms of updating the curriculum and providing a vibrant environment, while at other places, the program suffers from quality education and infrastructure. There have been challenges in the recent past too, such as Covid related lock-down in Institutions and Industries. In the backdrop of the range, diverse status, and practices, there is a need for standardization while keeping space for local dynamics. Recently the National Education Policy 2020 has also overhauled the structure of the syllabi which has given scope for the academics and administrators to re-think the education system and prepare students for the future. In view of this, studies are imminent to analyze the present status of tourism education in the country while planning a model of updated structure and syllabi to be followed across the country. The demand for effective e-learning has necessitated online education strategies by educational institutions. The future of tourism education is heading towards moreonline and distance learning using technologies. The paper through extensive reviews and discussion, summarizes the action for the future of tourism education to be one that develops modern talents with an adequate theoretical basis, strong practical abilities, and high comprehensive quality in order to meet the dynamics of the tourism industry.

Keywords: Tourism education, National Education Policy, Higher Education Institutions (HEIs), Tourism curriculum and E-learning in tourism.

Introduction

Once a great Chinese philosopher, Quan-Tzu (500 BC) said, "If you are thinking a year ahead, sow a seed, if for ten years, plant a tree, but if for a hundred years ahead, educate people." This sentence of his elucidates the importance of sustainable education for an individual or the whole society or a country. Undoubtedly, the development of any country can be known

from its education system and economy. In the last few years, India has made tremendous progress in various aspects of education. Tourism is also one of those areas in which education is meeting the needs of trained employees not only in India but all over the world. If we talk about the tourism industry, it has emerged as the most demanding sector in recent years both in terms of service and service providers. Through rapid growth, the tourism industry provides direct and indirect employment to a large number of skilled and unskilled people. In India, this industry contributed 6.8% of the total economy to the GDP (IBEF, 2020), which would be expected to grow an average of 7.8% in the next decade annually (WTTC, 2020). India is ranked 54th position in Travel and Tourism Development Index -2021 by WEF with an overall score of 4.1 (WEF, 2021). It generated earnings of 1 16.91 lakh crore in 2021 (Goel P., 2022) and employed 4.2 crore people which is 8.1 % of the total jobs.

Today everyone loves to travel and visit new places; this is the reason why the tourism industry has become one of the most booming industries across the globe. As a result, education in tourism has become an emerging trend in the world. Thus, making a career in the tourism industry in India has also become one of the most common choices in the past decade. Its major employment sectors are; state tourism departments, travel agencies, tour operators, immigration and customs, airlines, hotels, and many other related industries such as interpreters, tour guides, catering services, tourism promotion and sales, etc. Apart from this, students can also become a part of a large international travel and tourism enterprise or work in a privately run tour operator agency, depending on their curriculum, specialization and experience. Such demand for professional employees in the sector resulted in a high number of colleges and universities offering Bachelor, Master, and Doctorate degrees in tourism studies.

World Tourism Organization (WTO), an international agency of UNO for tourism has also suggested "competitive and sustainable tourism policies and tools and support tourism education and training along with the generation of market knowledge for tourism. Additionally, it is working to make

tourism an effective tool for development through technical assistance projects in more than 100 countries around the world. For instance, it has suggested seven guidelines for modernizing and reconstructing a more sustainable, inclusive, innovative educational and professional pathway to enhance access to tourism education;

- 1. Increase Access to Tourism Education
- 2. Update Tourism Curricula
- 3. Integrate Tourism Education into Secondary School Curricula
- 4. Innovate Undergraduate and Graduate Tourism Education
- 5. Standardize Certifications
- 6. Expand Tourism Education Quality Assurance
- 7. Connect Tourism Graduates with Employment Opportunities (*UNWTO*, 2022)

Thus, there is a need to adopt a comprehensive, unbiased, and global approach to tourism education also in India to ensure that students interested in tourism education and research are exposed to it.

Research Methodology

The study is descriptive in nature and based on secondary data. For this, a list of tourism institutes in India and their curriculum has been analyzed by a detailed survey of their websites and course structure. Apart from the institutes and their curriculum, some research papers have also been analyzed to get a detailed study of the current situation in the world in general and India in particular.

Objectives of the Study

- To discuss the present status of tourism education in higher education system in India.
- To provide an overview of the dynamics of tourism education from historical and present perspective.

 To summarize the actions and approaches to tourism education in the future in order to meet the dynamics of the tourism industry.

Literature Review

Evolution of Tourism Education from Past to Present-Global Perspective

Tourism education grew from the early 1900s to the early 2000s. Although the formal study of tourism began as early as the 1940s, little attention was paid to the interest in tourism education until the 1980s (Koh, 1994). In the first period, tourism was considered a practical sector and was integrated into other major disciplines (Laws, E. & Scott, N., 2015); research during this period was dominated by scholars from Germany, Switzerland, and Austria. The first steps towards internationalization were seen in the second period with the expansion of tourism education and research (Vukoniæ, B., 2002) into Anglophone countries and some other developing regions. Lastly, the third period shows international recognition of tourism in the field of education and research (Correia, 2021). As Hsu, Xialo & Chen (2017) have also mentioned that tourism as a field of study began to be understood in higher education about 50 years ago(Hsu, Xialo & Chen, 2017). During the globalization of higher education, tourism programs have achieved remarkable success worldwide in attracting students, scholars and diverse areas of research interests(Airey D., 2015). Airey has also described four developmental stages of tourism education (Airey D., 2008). Airey (2008) also argued in which he described the existence of four phases of the development of tourism education within 40 years; which are as follows;

• Industrial phase (1960s–1970s), tourism education in the early stage was characterized as having a strong business and career-orientated career intention and contentwith an excessive reliance on "extradisciplinary knowledge" (Tribe *J.*, 1997).

- Fragmentation phase (1980s-1990s) is the next stage in which there was debate and uncertainty about curricular content. With disintegration because of competition among its relevant disciplines, several hospitality programs expanded offerings to include tourism and vice versa (*Cathy H.C. Hsu, Honggen Xiao, Nan Chen*). In 1989 during this phase, World Tourism Organization also decided to set up an International Centre for Education and Research in Tourism (*Vukoniæ, B., 2002*).
- Subsequently, the benchmark phase (2000s) was followed by more academic and long-term progress beginning with the introduction of consensus on the broad content oftourism programs.
- Finally, in the mature phase (2010 and beyond), hospitality and tourism educators have since been included in the mainstream social science and higher education communities with apprehensions about issues, e.g., the knowledge base and effective teaching (Hsu, Xialo & Chen, 2017).

Although education and research is a slow processes and knowledge is accumulated and transmitted across generations of scholars, the contribution of the academic community to the study of tourism, as seen by the growth of scholarly journals, has occurred remarkably quickly and certainly in less than a generation.

Tourism Education System in India- Present Scenario

As like every professional sector, tourism as being a service sector also requireswell-trained and experienced staffto serve its customers. To meet the huge demand for skilled and trained people in the tourism industry, many institutes in India offer well-structured tourism education in the form of multi-level courses. In this view, many institutes, colleges, and universities are now running a variety of tourism courses in various nomenclatures (see table 2). In India, however, discussions on tourism began in the middle of the 19th century when the Sir

Table 2: Universities/Institutions Run Tourism Courses in India

	Central	State	Private	Deemed to be	Open	Leading Colleges
S. No.	Universities	Universities	Universities	Universities	Universities	Institutes
H	IGNTU Amarkantak	DAVV In dore	Chandigarh University	Christ University	IGNOU (Central University) Delbi	IIT TM Gwalior
2	Pondich erry	Jiwaji University	Lovely Professional	Amity University	Uttarakhand Open	IITTM
	University		University		University	Bhubaneshwar
3.	Banaras Hindu	Kurukshetra	Garden City University	D.Y. Pati I University,	RajarshiTandon	IIT TM Noida
	University	University		Mumbai	Open University	
4	HNB Garhwal University	Punjab University	Jagran Lakecity University	Jain Universi ty	Global Open University, Nagaland	IIT TM Bodhgaya
rç.	Central University of Jammu	BU Jhansi	Royal Global University, Guwahati	SOA University, Bhubanesh war	BAOU, Ahm edabad	IITTM Nellore
.9	Central University of Kashmir	Lucknow University	NIMS University, Jaipur	Chaitanya University, Warangal	Karnataka State Open NIWS-IITTM Goa University	NIWS IITTM Goa
7.	Assam University	MDU Rohtak	YBN University, Ranchi	IIS Jaipur		NITHM Hyderahad
						namin fr
∞.	Sikkim University	Bangalore University	Pacific University, Udaipur	Hindustan Institute of Technology & Science,		KITTS Kerala
				Chennai		
.6	North East Hill University	University of Kerala	Shcolini University, Solan			IIM Sirmaur
10.	Tripura University	KTM Nagpur University	Asian International University, Manipur			CVS-DU, Delhi
11	CentralTribal	BAMU Aurangabad	Galgotias University,			St. Thomas
	University of And hra Pradesh		Noida			College, Kerala
12	Central University of Karnataka	APS University Rewa	Nirwan University, Jaipur			St. Xaviers College, Mumbai
	oi karnataka					

Universities Kakatiya University, R. Warangal				
	Universities	Universities	Un iversities	Institutes
T,	Ram Krishana Dhamarth			VIMS, Coimbatore
, X	Foundation University, Ranchi			
Madurai Kamraj R	Ramch andra			UEI Global, Jaipur
	Chandravansi University, Palamu			
Jamia Milia Islamia, Mahatma Gandhi Sl	Shri Krishna University,			PIMG Gwal ior
University, Kottayam C	Chhatarpur			
Ja	Jaipur National			Asia Pacific
Ö	University			Institute of
				Manage ment, Ahme dabad
Himachal Pradesh G	GNA University,			Heri tage Institu te
P	Phagwara			of Hoteland
				Tourism, Shimla
urdwan Pa	University of Burdwan Parul University, Varodara			VSMLucknow
	Jaipur National			Ramnarain Ruia
University, Jodhpur U	University			College, Mumbai
HPTU Hamirpur G	GD Goenka Uni versity,			
G	Gurgaon			
Mangalore University Te	Techno Global			
Ü	Un iversity, Shillong			
Manipur University Mohan lal Sukhadia Ba	Bahra University, Shimla			
University, Udaipur				
Berhampur University K	Kaziranga University,			
	Assam			
Cluster University of IC	ICFAI University, Sikkim			

John Sargent Committee was set up in 1945 to promote and develop tourism in India. Thereafter, with the increase in tourism activities in India, there was a need to impart tourism education and training for professional and skilled manpower in the field of tourism (Saner T, 2016). In this effort, the Government of India established an autonomous institute under the Ministry of Tourism, Indian Institute of Travel and Tourism Management (IITTM) in 1983 to deliver professional training and education to the employees of the tourism industry in India (Singh S, 2019). After the announcement of the National Action Plan for Tourism in May 1992, tourism education got quite an impetus in India.Later many institutions and universities started with one year/ two years diploma then bachelor's (3 years) and master's (2 years) and research degrees in tourism and travel management. In India, tourism education is run by the public sector as well as the private sector, from school education to technical education, higher education and research level by the respective quality-assured government bodies, with control and funding from central, state and private (Patel J, 2013). For instance, at the school level, it is certified by State Board under Central Government Vocational Education (Jayswal DK & Mishra JM, 2021), at the technical level in Polytechnic Colleges and Technical Universities by AICTE and at higher level by both UGC and AICTE.

Since tourism is not just an industry but is associated with other sectors such as accommodation and hospitality and travel trade, apart from tourism, hospitality education is also related to tourism education. Hence, tourism education is imparted not only through these national-level universities or institutes but various other hospitality education and training institutes such as FCIs, IHMs, and Polytechnic Colleges approved by AICTE and IATA/UFTA-certified institutes are also to prepare professionals for the tourism industry in India. At present, there are 22 Central, 28 State, 01 PSU owned &31 private Institutes of Hotel Management (IHMs) approved by the National Council for Hotel Management and Catering Technology (NCHMCT) and 12 Food Craft Institutes (FCIs), which offer various certificate, diploma and degree courses in hotel

management and hospitality to provide hospitality education and training in India (*www.nchm.nic.in*).

Courses for Tourism Education in India

University Grants Commission, the statutory body for maintaining standards of teachingand research in university/higher education in India, has allocated different nomenclature of courses in tourism education at undergraduate and postgraduate levels. Students educated in tourism as a specialization course find a good career option in the tourism industry. There are many degree courses in tourism education available to students after schooling from graduate level research degree, some of the courses and their specializations (see table-1);

Universities/ institutions and colleges have a great role to play in making students ready for the future. This could be done either by revamping the curriculum or by training them to the business requirements of contemporary travel companies. Indian institutions must also provide students with an overall view of the industry and the various verticals that exist in them. There should be electives like outbound tourism, adventure tourism, leisure tourism, medical tourism, business travel and corporate travel management, MICE (Meetings, Incentives, Conferences, Exhibitions) tourism, etc. Quality education with appropriate job opportunities is the need of the hour. The recent National Education Policyalso has overhauled the structure of the syllabi which has given scope for the academics and administrators to revisit the tourism syllabi and prepare the students for the future. Presently, the Indian government and education regulatory bodies/ institutions have taken several steps to improve the existing education system from the beginning of education in India to the present. That is why in the World University Ranking-2023, India has got the 6th position in the list of countries that have been successful in making their place in the Times Higher Education (THE) ranking.

Table 1: Various Courses for Tourism Education in India

	Certificate/Diploma Courses		Unde rgraduate Courses	Post Graduate Courses
•	CTM- Certificate in Tourism	•	B.A Tourism Administration	M. Sc Airlines, Tourism &
	Management		/ Travel & Tourism	Hospitality Management
•	DATM- Diploma in Airline & Tourism		Management/Tourism Studies	 MTM - Masters in Tour ism
	Management	•	BTM - Bachelor of Tourism	Management
•	DTHM - Diplomain Tourism &		Management	 MTA - Master of Tourism
	Hospitality Management	•	BTS - Bachelor of Tourism	Administration
•	DTM - Diploma in Tourism		Studies	 MTTM - Master in Travel & Tourism
	Management	•	B.Sc Airlines, Tourism &	Management
•	PGDTM - PG Diploma in Tourism		Hospitality Management	 MBA -Travel and Tourism
	Management	•	BTTM - Bachelor of Tourism	Management
•	PGDTTM- PG Diploma in Travel &		and Travel Mana gement	 MBA - Tourism and Hotel
	Tourism Management	•	BBA - Travel and Tourism/	Management
•	PGDTHM- PG Diploma in Tourism &		Tourism Management	 MBA - Tourism and Hospitality
	Hotel Mana gement	•	B. Sc Airlines, Tourism, and	 MBA -Tourism Administration
			Management	 M. Voc Tourism & Hospitality
		•	B.Com Tourism and Travel	Management
			Management	
		•	B.VocTourism and	
			Hospitality	
80	Source: Compilation by Author			

Course Contents and Structure in India

When it comes to tourism studies, it is imperative to have cohesive and complete course contents and curriculum to deal with in-depth knowledge and skills in tourism education to include various aspects of the tourism business.Irrespective of the course format in most Indian tourism education institutions, certain core/ major subjects and course contentsare included for imparting tourism education in India (see Table 3)

Discussion

As the tourism industry is one of the highest foreign exchange earning sectors in the world, providing huge employment opportunities to lakhs of youth not only in India but across the globe, there is a need for equally educated people and skilled people are needed in this and its other allied sectors. The reason why tourism education is a vital tool to provide employment opportunities to the youth.

Future of Tourism Education

As Higher Education Institutions (HEIs) in India are focusing on creating online programs due to increased consumer demand(IBEF, 2022), tourism education institutions are also developing effective e-learning strategies due to the increasing popularity of tourism courses, and online programs are being made fast to increase the reach of students. With regard to program education, the future of tourism education will be increasingly more distance learning, using technologies. With the emergence of new technologies, it must continue to strive for innovations in the future so as to cultivate modern talents with high theoretical levels, strong practical abilities, and high comprehensive quality to meet the growing needs of the service industry in the future. George, B. (2013) has stated that India's open and distance education universities like IGNOU provide opportunities for students to study through distance education programs and e-learning for fulfilling their educational aspirations. The contemporary

Table 3: Course Contents and Structure in India

	Maj or Tourism Subjects	Knowledge and Course Contents		Assimilation of Tourism Skills
•	Principles of Management	Basic of Tourism Knowledge	•	Classroom Lectures
•	Heritage, History & Culture	Tourism Marketing	•	Vide o Simulations
•	Tourism Products and Resources in India	Tourism Finance, Forex Knowledge	•	Local / National Study Tour
•	Tourism Destinations & Resources in the	· Tourism Entrep reneurship, International	•	Expert Counselling
	World	Trade	•	Even ts Organization
•	Communication Skills for Customer	Tourism Research & Statistics	•	Expert Interaction
	Services	 Customer Relationship Management 	•	Workshop & Seminar
•	Hotel and Hospitality Management	Tourism Business Communication	•	Industry Interaction
•	Tourism Marketing	Tourism Principles&Laws	•	Industry/ Property Visit
•	Tourism Policy and Law	World Geography	•	Summer Job Training
•	HRM in Tourism	 His tory Art Archi tect ure & Culture 	•	Interview/Group Discussion
•	Financial Management	 Hotel Management, Hosp itality 	•	Project Report Writing and Viva
•	Travel Agency and Tour Operations	Behaviour	•	Mock Interviews
•	Economics of Tourism	Transport Management		
•	Research Methodobgy	Tourism Business Operation		
•	Computer Application for Tourism	Event Man agement		
•	Air Ticketing/ Fares	• Tourism Products & Services		
•	Public Relations	Destination Management		
•	Event Management	Impact of Tourism		
•	Ecotourism	 Itine rary Planning & Costing 		
•	Accounting Management	 Forex Management 		
	Souræ: Compilation by Author			

practices of online learning technologies being used by such universities/ institutionspave the way for maximum access to tourism education by providing an intensely personalized and enriching classroom experience through e-learning materials and real-time classes. As European countries have also witnessed to restructure of the higher education programs in their traditional universities into a hybrid mode, with classroom sessions held mostly in the evening and some on weekends and the rest online. It has dual benefits for the students in comparison to the traditional base; firstly, they can learn directly from the experiences of their classmates who have industry experience; secondly, they find time to do part-time jobs in their spare time (*George, B., 2013*).

Conclusion and Suggestion

As quality teaching and learning in tourism education matters for the student to learn practical skills (Luka & Donina 2012, Sharma A, 2017) at higher education and research levels (Vukoniæ, B., 2002), it plays animportant role in society by creating new knowledge (Jianwei Qian, Rob Law & Xinjian Li, 2019), passing it to students and nurturing innovation. This is the reason that for the past few years, many research articles have been published in the field of tourism education. Though tourism education has been largely recognized as a separate subject and discipline at present, but still in many institutions, it is placed under the traditional discipline and subjects. In India, the diversities in the curriculum and teaching-learning practices can be felt from the fact that the tourism program is being run at secondary schools under Vocational Education, at graduation, and post-graduation, and at doctoral research as well.It fails to graduate tourism professionals with the skills and value systems that will allow them to lead transformative change within a global society.

In India, there is a need to adopt a comprehensive, fair, and global approach to tourism education to ensure that students interested to pursue tourism programs and research are exposed to it. Furthermore, a need to establish a specialized world-class tourism university that can offer some specialized tourism programs so that the university can also bring all the institutions in the field of tourism and hospitality education under one umbrella. India needs to promote world-class education, training, and research program in tourism and create a repository of literature on tourism studies. Kumar R and Khan S (2021) have also suggested that tourism education in India can be strengthened through integration between the tourism course curriculum and the necessary orientation in the skills to be enhanced in the learners and desired by the tourism industry (Kumar R and Khan S, 2021). To promote tourism education more in India, it needs to be implemented more in an informal way as well as to be integrated with foundation courses and in the form of multidisciplinary courses in every degree. To create trained manpower for the tourism industry through quality tourism education (Saner T, 2016), a carefully designed tourism education policy is of prime importance to the nation. This needs a strategy to be implemented by academicians, tourism planners, and government and private organizations. As the study of tourism includes studies in the fields of history, culture, sociology, psychology and economics from the humanities stream, on the other hand, it should include studies in the fields of science, geography, environmentand statistics, etc.; for this, it should be introduced as an important subject in the Indian school curriculum at secondary and senior secondary levels to increase the awareness of tourism among students and youth. Apart from providing education, the students acquiring tourism degrees should be gone on-the-job training programs during their curriculum and administrative training phase as a mandatory part of the degree; this will help them get on-thejob exposure. Thus, to bring global exposure to Indian institutions, efforts should also be made to introduce exchange programs with foreign institutions for both students as well as faculty and visiting faculty from internationally reputed tourism institutions.

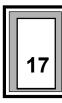
REFERENCES

- Airey, D. (2008). Tourism Education Life Begins at 40. *Téoros*, 27(1), 27-32.
- Airey, D. (2015). Forty Years of Tourism Studies A Remarkable Story. *Tourism Recreation Research*, 40(1), 6-15.
- Correia, L. (2021). Higher Education Institutions and Development: Missions, Models, and Challenges. *Journal of Social Studies Education Research*, 12(2), 1-25.
- George, B. (2013). A Critical Peep into Tourism Education in India: An Ex-Insider's Reflections. Retrieved form https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2227986
- Goel P., Garg A., Walia N., Kaur R., Jain M. & Singh S. (2022). Contagious diseases and tourism: a systematic review based on bibliometric and content analysis methods. Qual Quant, 56(5), 3085-3110. DOI: 10.1007/s11135-021-01270-z
- Hsu, C.H.C., Xiao, H. & Chen, N. (2017). Hospitality and tourism education research from 2005 to 2014: Is the past a prologue to the future? *International Journal of Contemporary Hospitality Management*, 29(1), 141-160.
- IBEF (2022). Tourism and Hospitality in India. Retrieved from https://www.ibef.org/industry/tourism-hospitality-india
- Jayswal, D.K., Mishra, J.M. & Veeraiah, P. (2021). Curriculum Transaction Strategies for Vocational Tourism Education in Schools: A Study on Haryana and Himachal Pradesh. *Mekal Insights*. 5(1 & 2), 12-32.
- Jianwei Q., Rob L. & Xinjian L. (2019). Education Research in Tourism: A longitudinal Study. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 24, 120-129.
- Koh, Y.K. (1994). Tourism Education for the 90s'. Research Notes and Report, 1(4), 853-855.
- Kumar, R. & Khan, S. (2021). Tourism Education in India: A Supply-Demand Gap. *International Journal of Hospitality and Tourism Systems*, 14 (2).
- Laws, E. & Scott, N. (2015). Tourism Research: Building from Other Disciplines. *Tourism Recreation Research*, 40, 48-58.
- Patel, J. I. (2013). Education System in India. *International Journal for Research in Education*, 2(2), 39-48.

- Saner, T., Bahçelerli, M., Nesrin & Eyupoglu, S. (2016). The importance of practical training in tourism education. 916-920. Retrieved from https://www.researchgate.net/ publication/312127628_The_importance_of_practical_ training_in_tourism_education
- Sharma, A. (2017). Tourism and Hospitality Education for Sustainability in Rajasthan State. Retrieved from https://www.thehighereducationreview.com/magazine/tourism-and-hospitality-education-for-sustainability-in-rajasthan-state—QZNM760512898.html.
- Singh, S. & Kannaujiya, S. & Sharma, A. (2019). An Overview on Tourism Education in India. *International Journal of Current Advanced Research*, 8, 20618-20621.
- The World Travel & Tourism Council (2020). Travel & Tourism: Global Economic Impact & Trends, 1-20. Retrieved from https://wttc.org/
- Tribe, J. (1997). The Indiscipline of Tourism. *Annals of Tourism Research*, 24(3), 628-657.
- Uppink, L. & Soshkin, M. (2022). *Travel & Tourism Development Rebuilding for a Sustainable and Resilient Future*. Insight Report. 2-90. Retrieved from https://www.weforum.org/reports/travel-and-tourism-development-index-2021
- Vukoniæ, B. (2002). Tourism at the Graduate School of Economics and Business. Conference proceeding- Rethinking of Education and Training for Tourism, University of Zagreb.
- World Tourism Organization (2022). *UNWTO Tourism Education Guidelines*. UNWTO, Madrid. DOI: https://doi.org/10.18111/9789284423941.

Websites:

- WEF, 2021. Travel & Tourism Development Rebuilding for a Sustainable and Resilient Future. Insight Report. May 2022. 2-90.
- WEF, 2021. Travel & Tourism Development Rebuilding for a Sustainable and Resilient Future. Insight Report. May 2022. 2-90.
- World Tourism Organization (2022), UNWTO Tourism Education Guidelines, UNWTO, Madrid, DOI: https://doi.org/10.18111/9789284423941.
- WTTC (2020). Travel & Tourism: Global Economic Impact & Trends. 1-20 (https://wttc.org/).



उच्च शिक्षा में डिजिटल शिक्षणशास्त्र की स्वीकार्यता

-अभिषेक वर्मा¹

सारांश

प्रौद्योगिकी, शिक्षा को विस्तारित होने की स्वेच्छा प्रदान करती है, प्रौद्योगिकी सहायक शिक्षण शिक्षक की शैक्षिक भूमिका को प्रभावकारी बनाता है। सर्विदित है कि शिक्षण अपने आप में एक अभिकल्पित प्रतिमान है जो परिस्थिति अनुरूप अद्यनित होता रहता है। सामान्य शिक्षण की अवधारणा में अधिगम उद्देश्य आधारित योजनात्मक क्रमबद्धता, पाठ्यक्रम अनुरूप प्रकरण, अध्ययन सामग्री, शिक्षण विधि, शैक्षणिक तौर— तरीकें शामिल रहते है वहीं डिजिटल शिक्षणशास्त्र की संकल्पना में सामान्य शिक्षण की अवधारणा के अतिरिक्त प्रौद्योगिकी सहायक अद्वितीय अनुदेशन, शैक्षिक तौर—तरीके, ई—सामग्री, ई—पुस्तकें, वीडियो, ई—ट्रांसक्रिप्ट, आभासी शिक्षण कौशल एवं आईसीटी जागरूकता भी शामिल रहती है। यह लेख एक नए डिजिटल शिक्षणशास्त्र की पृष्टभूमि और आकांक्षाओं को रेखांकित करता है जो इस परिवर्तन हेतु तैयार किया गया है कि एक अधिगमकर्त्ता

¹ शोधार्थी, शिक्षा विभाग, महात्मा गांधी अंतरराष्ट्रीय हिंदी विश्वविद्यालय, वर्धा, महाराष्ट्र

डिजिटल प्लेटफार्म पर अधिगम एवं शिक्षण को कैसे स्वीकार्य करता है, जिसके परिणामस्वरूप वह स्थायी अधिगम प्राप्त करता है। डिजिटल शिक्षाशास्त्र के बारे में पिछले अध्ययन ई—लर्निंग प्लेटफार्मों, सीखने के तरीकों, संचार उपकरणों का प्रतिनिधित्व करते हैं जो समय एवं स्थान पर किसी भी बाधा के बिना प्रतिभागियों के बीच सहयोगी,इंटरैक्टिव शिक्षण एवं सीखने की सुविधा प्रदान करते हैं। इस लेख के माध्यम सेशोधार्थी मुख्य रूप से डिजिटल शिक्षणशास्त्र के अभिकल्प, अवयव एवं शिक्षक भूमिका के संप्रत्यय को वर्णित करना चाहता है।

मुख्य शब्दावली— डिजिटल शिक्षणशास्त्र, शिक्षक भूमिका, शिक्षण स्वीकार्यता।

प्रस्तावना

"नवाचार नवीन एवं पुरातन का ऐसा अनुटा संगम हैं जो नवीन इकाई के रूप में अपनी विशिष्टताओं के साथ प्रकट होता है।" यह नवचारिता समाज के आर्थिक, सामाजिक, राजनीतिक, वैयक्तिक एवं शैक्षिक पहलूओं से संबंधित है जिसमें शिक्षा सबसे विशिष्ट स्थान रखती है क्योंकि शिक्षा स्वयं को परिवर्तन के फलीभृत स्थापित करने का सामर्थ्य रखती है यही कारण है कि शिक्षा एवं शिक्षण परम्परागत दृष्टिकोण से होते हुए भी वर्तमान में आधुनिकता को ग्रहण कर चुकी है।विगत् वर्षों में आये प्रौद्योगिकी परिवर्तन ने शिक्षण के स्वरूप को नवीनता के साथ विकसित एवं स्थापित होने का अवसर प्रदान किया है। प्रौद्योगिक क्षेत्र के साथ शिक्षण में बढती अभिरुचि का एक प्रमुख कारण प्रौद्योगिकी अभिकल्पिता, उपयोगिता एवं प्रस्तुतीकरण भी है। कंप्यूटर, मोबाइल और अन्य हैंडहेल्ड कंप्यूटिंग आधारित उपकरणों की एक विस्तृत विविधता आसानी से जानकारी तक पहुँचने, दुनिया भर के लोगों के साथ संवाद करने और अपने दैनंदनी कार्यों को सहज रूप से करने की अनुमित देताहै। अतः हम यह महसूस कर सकते हैं कि वर्तमान सन्दर्भ में शिक्षार्थियों के ज्ञान को संचरित करने के लिए प्रौद्योगिकी युक्त शिक्षण मंच की आवश्यकता है जिसमें वे अधिगम आधारित उपकरणों की श्रृंखलाओं से जुड़ते हुए विशाल सूचनाओं के भंडारण तक आसानी से पहुँच सकता है। वेबकैम, इलेक्ट्रॉनिक पुस्तकें एवं ऑडियो डिवाइस, रिकॉर्डिंग व्याख्यान आदि डिजिटल उपकरण की उपलब्धता ने ब्लेंडेड अधिगम, फिल्प्ड कक्षा, तुल्यकालिक एवं अतुल्यकालिक शिक्षण, ई— अधिगम तथा ऑनलाइन शिक्षण आदि को शिक्षा में मुख्य स्थान दिया है। इन्हीं प्रौद्योगिकी के विकास से ही ऑनलाइन शिक्षा का जन्म हुआ है जो वर्तमान में सम्पूर्ण विश्व में अत्यंत लोकप्रिय शिक्षा का माध्यम बन गया है। जोशिक्षकों के शिक्षण में परिवर्तित हुई है। हालाँकि ऑनलाइन शिक्षा का जन्म परम्परागत शिक्षा से ही हुआ है लेकिन ऑनलाइन शिक्षा का उद्देश्य, उसकी क्रिया प्रणाली, अधिगम—शिक्षण नियम आदि परम्परागत शिक्षा से प्रायः भिन्न हैं। इस शिक्षा प्रणाली को प्रभावशाली बनाने के लिए अद्यतन शिक्षणशास्त्र की भी आवश्यकता है। जिसे डिजिटल शिक्षणशास्त्र से परिभाषित किया जा सकता है।

डिजिटल शिक्षणशास्त्र : अद्यतन भविष्य

डिजिटल शिक्षणशास्त्र शैक्षणिक मूल्यों और तरीकों का पुनर्मूल्यांकन करने का अवसर प्रदान करती है। यहाँ फिर से डिजिटल शिक्षाशास्त्र को तकनीकी के साथ नहीं जोड़ा जाना चाहिए। इसके अतिरिक्त यह शब्द, अधिगम विशिष्ट केन्द्रित मूल्यों को संदर्भित करता है जो न केवल विषय-शिक्षा के लिए बल्कि व्यक्तिगत, सामाजिक प्रक्रियाओं, सम्बन्धों अधिगम प्रक्रिया के आंतरिक प्रणाली तक प्रासंगिक हैं। विभिन्न शैक्षिक आवश्यकताओं वाले शिक्षार्थियों हेत् भी शिक्षण एवं अधिगम को बढ़ावा देने के लिए प्रशिक्षकों को नए-नए उपकरण प्रदान किये जा रहे हैं जिससे शिक्षा को गुणवत्तापूर्ण, सहज एवं सरलबनाया जा सके। फलस्वरूप डिजिटल उपकरण के प्रति शिक्षकों एवं प्रशिक्षकों को भी व्यवहारात्मक होना पड रहा हैजो डिजिटल सक्षम शिक्षण का उपयोग करने का अवसर प्रदान करता है। डिजिटल शिक्षणशास्त्र भी शिक्षण सिद्धांतों के आधार पर ही संचरित होती है। अधिगम या अनुदेशात्मक डिजाइन के कई ढांचे और प्रतिमान शिक्षकों और पेशेवर प्रशिक्षकों दोनों के अभ्यास को रेखांकित करता हैं। उदाहरण के लिए, ब्लूम एवं अन्य (1956) द्वारा, (ज्ञान, बोध, समझ / अनुप्रयोग, संश्लेषण, विश्लेषण और मूल्यांकनके छह अलग-अलग स्तरों कावर्गीकरण अधिगम एवं शिक्षण दोनों क्षेत्रों में शैक्षणिक नियोजन प्रक्रियाओं के लिए एक सामान्य प्रतिमान है। इसी प्रकार अधिगम एवं पूर्व ज्ञान के आधार परसक्रिय तथा सार्थक समझ का निर्माण करने में शिक्षार्थियों को शामिल करने वाली व्यक्तिगत स्तर की उत्पादकता, सीखने की प्रक्रियाओं की मान्यता भी अधिगम एवं शिक्षण क्षेत्रों के लिए आम है। एक डिजिटल शिक्षणशास्त्र अभिकल्प इन सिद्धांतों में से किसी को भी नकारती नही है किन्तु शिक्षार्थियों को सुविधाप्रदाताओं और शिक्षकों द्वारा सामना की जाने वाकी अतिरिक्त चुनौतियाँ हैं। सबसे पहले विश्विद्यालय और शिक्षार्थियों दोनों के पास उपयुक्त प्रौद्योगिकी प्लेटफ़ॉर्म और बुनियादी ढांचा तक पहुँच तैयार करना होगा। डिजिटल शिक्षणशास्त्र प्रभावी नहीं हो सकता है यदि लोग (शिक्षाविद और छात्र) प्रौद्योगिकियों का उपयोग नहीं करते हैं। शिक्षार्थियों और शिक्षकों दोनों के पास आई.टी. कौशल और आत्मविश्वास को जागृत करना होगा। विशेष रूप से शोध इंगित करता है कि प्रौद्योगिकियों की उपयोगिता और उपयोग मेंआसानी के बारे में शिक्षार्थी की धारणाएं उनके ऑनलाइन सीखने के दृष्टिकोण और व्यवहार पर सार्थक प्रभाव डालती हैं (सुमुक, बी, हेरिको, एम. एवं पुसनीक, एम., 2011)।

डिजिटल शिक्षण शास्त्र में गुणवत्ता मानक

क्वालिटी मैटर्स प्रोग्राम (2013) के अनुसार निम्न गुणवत्ता मानकों के आधार पर पाठ्यक्रम अभिकल्प में विभिन्न घटकों को शामिल किया जाना चाहिए:—

- क. पाठ्यक्रम प्रक्रिया एवं दिशा-निर्देश का पालन करना।
- ख. औसत स्तर के अधिगम उद्देश्य का निर्माण करना।
- ग. कार्य-प्रणाली एवं शिक्षण परिणामों का आकलन, मापन एवं मूल्यांकन करना।
- घ. संवादात्मक अधिगम के अवसर प्रदान करना।
- ङ. शिक्षार्थियों के लिए संसाधनों एवं सामग्रियों को उपलब्ध करना।
- च. सभी तक अधिगम की सुलभ पहुँच को सुनिश्चित करना।

उपर्युक्त मानकों के आधार पर शिक्षण प्रक्रिया को सुदृढ़ एवं स्थायी बनाया जा सकता है। रोवई (2002) के अनुसार, यदि प्रशिक्षक डिजिटल सहायक तरीकों को अपने शिक्षण में अपनाते है तो उसे शिक्षार्थियों के सामुदायिक भावना में वृद्धि होती है एवं सफल अधिगम सृजित होता है। सफल कक्षा की सटीक माप किसी कक्षा में प्रतिभाग करने वाले शिक्षार्थियों की मात्रा, निरंतर अंतःक्रिया एवं शिक्षक को शिक्षार्थियों द्वारा मिले सुझाव एवं प्रतिपुष्टि पर निर्भर करता है जो प्रशिक्षकों को डिजिटल शिक्षण करने के प्रति अभिप्रेरणा या दुश्चिता को बढ़ाता है (वोंग, 2005)।

उच्च शिक्षा में डिजिटल शिक्षणशास्त्र

उच्च शिक्षा में ऑनलाइन शिक्षा का निरंतर बढ़ता निवेश प्रारम्भ में खर्चीला एवं अनावश्यक प्रतीत हो रहा है लेकिन अगर हम इसके दूरगामी परिणामों की ओर ध्यान दें तो हम पाएंगे कि ऑनलाइन अधिगम आगामी भविष्य में कॉलेजों और विश्वविद्यालयों के लिए लागत प्रभावशीलता का प्रतिनिधित्व कर सकता है क्योंकि ऑनलाइन अधिगम एवं शिक्षण के लिए वृहद् भौतिक प्रांगण, अनावश्यक कार्मिकों एवं संसाधनों की आवश्यकता नहीं होती है (मागाल्हेस, 2020)। केवल संभावित रूप से बढ़े हुए शिक्षार्थियों के नामांकन को समायोजित करने की आवश्यकता ही होगी। इन सभी शैक्षिक कक्षाओं को इंटरनेट कनेक्शन की सुविधा वाले किसी भी स्थान पर संचालित किया जा सकता है।

प्रत्येक शिक्षण वातावरण को प्रभावी एवं रुचिकर बनाने के लिए शिक्षकों की भूमिका सर्वोपिर होती है। विस्तारित प्रौद्योगिकी विकास ने ऑनलाइन शिक्षण को शिक्षा व्यवस्था में सृजित किया हैं। ऑनलाइन शिक्षण का नमोमेषित प्रकार होने के कारण अत्याधिक प्रचलित एवं सारगर्भित है (मागाल्हेस, 2020) लेकिन ऑनलाइन शिक्षण की अपनी कुछ मूलभूत आवश्यकताएं भी हैं जिसे संज्ञान में लेते हुए ही एक शिक्षक को ऑनलाइन कक्षाएँ संचालित करनी चाहिए। ऑनलाइन शिक्षण एक द्विगामी संप्रेषण प्रक्रिया है जिसमें शिक्षक एवं शिक्षार्थी दोनों की सिक्रय भागीदारी होना अनिवार्य है। शिक्षक—शिक्षार्थी सिक्रयता यहाँ इसलिए भी सार्थक है क्योंकि ऑनलाइन कक्षा में प्रत्यक्ष एवं अप्रत्यक्ष अंतःक्रिया परम्परागत अंतःक्रिया से भिन्न होती है जिसका प्रभाव शिक्षार्थी की उपलब्धि पर अधिक पड़ता है। प्रभावी ऑनलाइन शिक्षण के लिए शिक्षकों को एक ऐसे पोषित

एवं सहायक वातावरण की स्थापना करनी होगी जो शिक्षार्थियों की शैक्षणिक कितनाइयों और सहकर्मी संघर्ष से जुड़े तनाव को कम करती हो (सूटन, 2020) क्योंकि ऑनलाइन शिक्षण के दौरान यदि शिक्षार्थियों की समस्या का समाधान नहीं होता है तो इसे शिक्षार्थियों में दृश्चिता एवं अरुचि उत्पन्न होने की संभावना होती है जिससे उनका उपलब्धि स्तर नकारात्मक रूप से प्रभावित होता है (अली, 2020)। शिक्षकों को यह भी सुनिश्चित कर लेना आवश्यक है कि ई-मेल, वेब-आधारित कॉन्फ्रेंसिंग (वेबिनार), ऑनलाइन चर्चा-परिचर्चा और फोन संपर्कों को शामिल करने के लिए संकाय और शिक्षार्थियों के मध्य संचार सतत और प्रभावी हो। साथ ही साथ ऑनलाइन कक्षाओं के संचालन से पूर्व शिक्षकों के द्वारा विषयवस्तू का निर्माण अवश्य रूप से कर लिया जाना चाहिए एवं यह विषय सामग्री आकर्षित, साहित्यिक चोरी से मुक्त होने के साथ-साथ ब्लूम के वर्गीकरण या एंडरसन के वर्गीकरण (जो विश्लेषण, संश्लेषण और मूल्यांकन के माध्यम से ज्ञान के निर्माण को संबोधित करती है) के अनुरूप निर्मित होनी चाहिए जो शिक्षार्थियों के मूर्त-अमूर्त चिन्तन का विकास करने में सहायक होगा। जिसे शिक्षकों को अनुभवात्मक और सक्रिय शिक्षण गतिविधियाँ करने का अवसर प्रदान हो सकेगा। शिक्षकों के द्वारा वास्तविक समस्याओं, केस स्टडी, रोल-प्लेइंग, प्रयोगों का संचालन , निर्णयन क्षमता आधरित खेल एवं परिदृश्यों को हल करने जैसी गतिविधियों का उपयोग ऑनलाइन कक्षाओं में किया जाना चाहिए जो उच्च स्तर की उपलब्धि को बढावा देगी। इसके अतिरिक्त विभिन्न प्रकार के फेसटाइम एवं ऑनलाइन वीडियो मीटिंग पोर्टल के माध्यम से शिक्षार्थियों को मार्गदर्शित भी किया जाना चाहिए। शिक्षकों के द्वारा शिक्षार्थियों को समय-समय पर आवश्यकता अनुरूप व्यक्तिगत निर्देशन प्रदान करते रहना चाहिए जिसे शिक्षार्थी सक्रिय रूप से शिक्षक से जुड़े रहते हैं। इस निर्देशन के द्वारा शिक्षार्थी में स्व-अनुशासन, स्वायत्तता, स्व-अधिगम करने की क्षमता में वृद्धि करने का प्रयास करता है।

शिक्षक ऑनलाइन कक्षा में एक फैसिलिटेटर की भूमिका का भी निर्वहन करता है। अतः शिक्षकों के द्वारा ऑनलाइन कक्षाओं के संचालन से पूर्व शिक्षार्थियों से सम्बन्धित सभी सूचनाओं को ई—मेल, सोशल मीडिया गुप्स, कोर्टरूम एवं अन्य पोर्टल के माध्यम से शिक्षार्थियों तक प्रेषित कर दिया जाना चाहिए जिससे शिक्षार्थी ऑनलाइन कक्षाओं में सक्रिय भूमिका का निर्वहन करने में समर्थ हो सके। शिक्षक की कक्षागत् प्रत्यक्ष एवं अप्रत्यक्ष अंतःक्रिया (लगातार शिक्षण के दौरान, शिक्षार्थियों के सफल होने की सराहना करना और सक्रिय अधिगम का समर्थन करने के लिए उत्तेजक गतिविधियाँ प्रदर्शित करना) शिक्षार्थियों की अभिरुचि को बढ़ाने एवं उच्च अपेक्षाओं को व्यक्त करने में सहायक होती है।

ऑनलाइन शिक्षण हेतु शिक्षक को विभिन्न प्रकार के पोर्टलों, सॉफ्टवेयर एवं प्रौद्योगिकी जागरूकता का होना भी आवश्यक है। इस प्रौद्योगिकी समझ के द्वारा ही एक शिक्षक प्रभावकारी शिक्षण का निर्माण कर सकता है। सभी ऑनलाइन सॉफ्टवेयरों में अब प्रशिक्षक एवं शिक्षार्थी दोनों के पास लॉग इन करने और सुविधाजनक समय पर पोस्ट का जवाब देने का विकल्प होता है। इसके अतिरिक्त ऑनलाइन निर्देश के दौरान चर्चा के लिए असाइनमेंट, रीडिंग, प्रोजेक्ट और परीक्षा के बारे में जानकारी देने हेतु एवं शिक्षार्थियों की सफलता को बढ़ावा देने के लिए चैट रूम, टेक्सिटेंग, ई—मेल और सम्मेलन आदि हेतु शिक्षार्थियों से संपर्क करने के लिए भी प्रशिक्षकों के पास विकल्प उपलब्ध है।

ऑनलाइन माध्यम में शिक्षार्थियों के उपलिख के मूल्यांकन हेतु शिक्षक सहकारी शिक्षण शैली, ओपन बुक परीक्षा, पोलिंग विवज, रोल प्लेइंग, रिपोर्टिंग एवं अन्य विकल्पों का चयन कर सकते हैं। इसके लिए शिक्षक को अपने शिक्षण कौशल एवं प्रौद्योगिकी कौशल में अमूल—चूल परिवर्तन करना होगा। इसके अतिरिक्त विभिन्न शिक्षण शैलियों और शिक्षार्थियों की शैक्षणिक शिक्तयों के मूल्यांकन हेतु गार्डनर की मल्टीपल इंटेलिजेंस (1983) सिद्धांत की भी सहायता ली जा सकती है।

अंततः ऑनलाइन अधिगम में शिक्षक विषय विशेषज्ञ, कंटेंट फैसिलिटेटर, टेक्नोलॉजिस्ट डिजानर, प्रबन्धक, व्यवस्थापक, परामर्शदाता, निर्देशक एवं मूल्यांकनकर्त्ता आदि भूमिकाओं का निर्वहन करता है।



चित्र सं. 1.1: डिजिटल शिक्षण में शिक्षक की भूमिका

डिजिटल शिक्षणशास्त्र हेतु शिक्षण स्तर एवं दक्षता

शिक्षण एक अधिक विकसित व्यक्तित्व और कम विकसित व्यक्तित्व के बीच का घनिष्ठ सम्पर्क है जिसकी संरचना कम विकसित व्यक्तित्व की शिक्षा को और बढ़ाने के लिए की जाती है। शिक्षण के प्रायः 3 सोपान होते हैं। जिसका प्रयोग डिजिटल शिक्षण में भी किया जाता है। इन सोपानों को चित्र सं. 1.3 में दर्शाया गया है।



चित्र सं. 1.2: शिक्षण के स्तर

ऑनलाइन/ऑफलाइन प्रस्तुति में शिक्षण-पूर्व अवस्था

शिक्षकों को सबसे रोमांचक और आसान तरीके से व्याख्यान पेश करना चाहिए। यह ऑनलाइन कक्षा या ऑफलाइन कक्षा शिक्षण में सबसे महत्वपूर्ण भागों में से एक है। इसमें उद्देश्यों के निर्माण एवं निर्धारण, पाठ्यवस्तु का चुनाव, शिक्षण शैली का चुनाव, शिक्षण व्यूह-रचना एवं शिक्षण युक्तियों का चयन आदि मुख्य क्रियाएं आती है। इसके अतिरिक्त ऑनलाइन शिक्षण में ये अच्छी तरह से तैयार किया जाना चाहिए और फिर वेब कैमरा के पास शिक्षार्थियों को सिखाने के लिए शुरू करना चाहिए। जिसके लिए बैठने की उत्तम व्यवस्था, उत्तम प्रकाश, तीव्र बैंडविड्थ का इन्टरनेट कनेक्शन, अपडेटेड डिजिटल डिवाइस, संचालन की जागरूकता, दृश्यात्मक विषयवस्तु (स्पष्ट एवं पढने योग्य), आवश्यकता अनुसार प्रौद्योगिकी सहयोग का प्रयोग करते हुए ऑनलाइन प्रस्तुति करनी चाहिए। जिससे ऑनलाइन शिक्षण में शिक्षार्थियों के प्रेरणा स्तर को बढाया जा सके। इसके अलावा, ऑनलाइन अध्ययन सामग्री को भी शिक्षार्थियों के समक्ष रचनात्मक तरीके से प्रस्तुत किया जाना चाहिए ताकि उन्हें सीखने का बेहतर अवसर मिल सके। यह अध्ययन सामग्री उपयोग के साथ-साथ सुनने और देखने वाली होनी चाहिए। जिसके माध्यम से शिक्षार्थी बाद में आयोजित होने वाली परीक्षाओं में इसका बेहतर उपयोग करके भी अच्छी उपलब्धि के स्तर तक पहुंच सकते हैं। इसमें निम्न क्रियाओं को रखा जाता है जिसे नीचे प्रस्तृत किया गया है:--

वृत्तिक उत्तरदायित्व

ऑनलाइन शिक्षक को ऑनलाइन निर्देश की सर्वोत्तम प्रथाओं को ध्यान में रखते हुए अपने वृत्तिक उत्तरदायित्व को दर्शाना चाहिए। ऑनलाइन शिक्षक एक चिंतनशील प्रैक्टिशनर्स होता है। जो निरंतर अपने अभ्यास पर ध्यान केंद्रित करते हुए अपने ज्ञान एवं कौशल के विकास के अवसर की खोज करता है। ऑनलाइन शिक्षक ऑनलाइन वातावरण में सहयोग के लिए शिक्षार्थी क्षमता को विकसित करता है और शिक्षार्थियों को वैश्विक नागरिकों के रूप में भाग लेने के लिए प्रोत्साहित करता है। वह एक सहयोगी वातावरण बनाता है। जहाँ शिक्षार्थी वैश्विक नागरिकों के रूप में

भाग लेता है जहाँ शिक्षार्थियों को समूहों में भाग लेने और सहयोगात्मक तरीके से कार्य पूरा करने के लिए प्रोत्साहित किया जाता है। इसके अतिरिक्त वे प्रभावी समय प्रबंधन रणनीतियों की समझ को भी दर्शाता है। इन सभी उत्तरदायित्व की पूर्ति हेतु विश्वविद्यालय एवं एम.एच.आर.डी. द्वारा विभिन्न प्रशिक्षण कार्यक्रम संचालित किये जाने चाहिए जिसे शिक्षकों का वृत्तिक विकास हो सके।

धौर्यता

लाइव वर्चुअल कक्षा में छात्र संलग्नता को बेहतर बनाने के लिए शिक्षक को अपने शिक्षार्थियों को अपार धैर्य के साथ सिखाना चाहिए। शिक्षार्थियों को ऑनलाइन पाठ्यक्रम सामग्री को इस रूप में वितरित किया जाना चाहिए कि वह सामान्य पुस्तकीय ज्ञान से बेहतर एवं संक्षिप्त हो। शिक्षार्थियों के समक्ष विषयवस्तु को एक समस्या के रूप में रखते हुए कक्षा का प्रारंभ करना चाहिए। इन सभी के लिए धैर्यता की परम आवश्यकता होती है।

शिक्षण विषयवस्तु

ऑनलाइन शिक्षण में शिक्षण विषयवस्तु की भूमिका सबसे अग्रणी होती है। एक शिक्षक की सबसे महत्वपूर्ण भूमिकाओं में से एक शिक्षार्थियों को समझने और समझने के लिए एक विषय के किसी भी पाठ को बहुत आसान बनाना है। यह विभिन्न भागों में समान रूप से विभाजित करके किया जा सकता है। जो अंततः शिक्षण के साथ—साथ शिक्षार्थियों द्वारा अध्ययन करते समय सरल हो जाता है। शिक्षकों को अलग—अलग समय पर विभिन्न हिस्सों को पढ़ाने का विकल्प चुनना चाहिए तािक छात्र इसे आसानी से समझ सकें। शिक्षक द्वारा सही रणनीितयों का पालन करके शिक्षार्थियों में रुचि उत्पन्न करना चाहिए।इसके अंतर्गत एक शिक्षक के द्वारा निर्मित की गयी विषय सामग्री आकर्षक, चयनात्मक, सुस्पष्ट होनी चाहिए। निर्मित किये गये शिक्षण उद्देश्य सीिमत संक्षिप्त एवं परिवर्तनात्मक होने चाहिए। इसके अतिरिक्त शिक्षक को अपने विषयवस्तु में शिक्षार्थीं के संज्ञानात्मक स्तर, भावात्मक स्तर एवं मनोचालक स्तर का ध्यान रखते हुए ही उद्देश्यों,

तथ्यों एवं उदाहरणों को स्थान देना चाहिए। जिसे विषयवस्तु को रुचिकर बनाया जा सके। शिक्षकों को यह भी पता होना चाहिए कि उन्हें ऑनलाइन कक्षाएँ एप्स में सीखने के लिए शिक्षार्थियों के लिए विशेष पाठ को तेज बनाने में किस गति से आगे बढ़ना चाहिए। इस प्रथा के बाद ही शिक्षकों को शिक्षार्थियों को लंबी अध्ययन सामग्री देने से रोका जा सकेगा।

कक्षागत् गतिविधियाँ

पारंपिरक कक्षाओं के भौतिक रूप में शिक्षक आसानी से शिक्षार्थियों को अंग्रेजी साहित्य या हिंदी साहित्य की पाठचपुस्तक के किसी भी पैराग्राफ को एक पाठ से पढ़ना शुरू कर सकते हैं लेकिन शिक्षार्थियों के लिए ऑनलाइन माध्यम से इस प्रकार के पाठ को सिखाना काफी मुश्किल है। इसके अलावा एक ऑनलाइन कक्षा में, यह संभव है कि छात्र की एकाग्रता भंग हो जाती है क्योंकि वे लैपटॉप या स्मार्टफोन के साथ अध्ययन करने के लिए अकेले बैठते हैं। यही कारण है कि शिक्षकों को ऑनलाइन शिक्षण के दौरान कुछ आकर्षक एवं रुचिकर क्रियाओं को भी जोड़ना आवश्यक है। इसके अतिरिक्त शिक्षक द्वारा शिक्षार्थी को ऑनलाइन पढ़ने वाले अन्य शिक्षार्थियों से बातचीत करने या पाठ आदि के किसी भी भाग पर क्लिक करके आपस में एवं शिक्षक से विचार—विमर्श करने की स्वतंत्रता होनी चाहिए। इसके लिए विभिन्न प्रौद्योगिकी एप्लीकेशन का उपयोग किया जाना चाहिए जिसके लिए प्रौद्योगिकी जागरूक होना एवं विचार विमर्श हेतु अंतःक्रिया कौशल का विकास करना आवश्यक है।

ऑनलाइन प्रस्तुति में शिक्षणेत्तर अवस्था

ऑनलाइन शिक्षण के समापन के पश्चात शिक्षकों को शिक्षार्थियों के द्वारा कक्षागत् अंतःक्रिया के समय दिए गये उत्तरों एवं शिक्षण के समय शिक्षार्थियों को होने वाली समस्याओं की समीक्षा की जानी चाहिए इसके अतिरिक्त उनसे उचित प्रतिपुष्टि प्रदान करने के लिए आग्रह करना चाहिए। ये प्रतिपुष्टि शिक्षण के स्तर, प्रौद्योगिकी गतिविधियों, कक्षागत् वातावरण एवं ज्ञान के अनुक्षेत्र पर आधारित होनी चाहिए जिसके लिए शिक्षक को 5 बिंदु

मापनी, विशेष रूब्रिक्स या अन्य किसी विधि का प्रयोग करना चाहिए। प्राप्त प्रतिपुष्टि के आधार पर शिक्षकों को निरंतर अपने शिक्षण में सुधार किया जाना चाहिए तभी प्रभावी ऑनलाइन शिक्षण की संकल्पना कर पाना सम्भव हैं।

निष्कर्ष

डिजिटल शिक्षणशास्त्र ई—लर्निंग प्लेटफार्मों, सीखने के तरीकों, संचार उपकरणों का प्रतिनिधित्व करते हैं जो समय एवं स्थान पर किसी भी बाधा के बिना प्रतिभागियों के बीच सहयोगी,इंटरैक्टिव शिक्षण एवं सीखने की सुविधा प्रदान करते हैं। इसे शिक्षकों के द्वारा अनिवार्य रूप से स्वीकार किया जाना चाहिए तब ही शिक्षण के प्रत्येक स्तर को प्रभावी बनाया जा सकता है।

संदर्भ ग्रन्थ सूची

- Benjamin, S.B. & David, R.K. (1968). Taxonomy of Educational Objectives: The Classification of Educational Goals. In David, R.K (Ed.). Longmans Publisher.
- BošTjan, S., Heri?Ko, M. & PušNik, M. (2011). Review: A metaanalysis of e-learning technology acceptance: The role of user types and e-learning technology types. Comput. Hum. Behav. 27(6), 2067-2077. https://doi.org/10.1016/j.chb.2011.08.005
- अली, डब्लू. (2020). नेस्सिरस्टी ऑफ ऑनलाइन एंड रिमोट लर्निंग इन हायर एजुकेशनः इन लाइट ऑफ कोविड —19 पेंड़ेमिक. हायर एजुकेशन स्टडीज, 10(3), 16—25.
- क्वालिटी मैटर्स प्रोग्राम (2013) क्वालिटी मैटर्स ओवरव्यू.मेरीलैंड ऑनलाइन. त्मजतपमअमक तिवजू, उचतवहतं उ.वतह
- गार्डनर, एच. (1983). द थ्योरी ऑफ़ मल्टीप्लइंटेलिजेंस. फ्रेम्स ऑफ़ माइंड ःन्यूयार्क. बेसिक बुक्स.
- मगल्हेस, पी., फेर्रेइरा, डी., कान्हा, जे. रोसारियो, पीए. (2020). ऑनलाइन वर्सेज ट्रेडिशनल होमवर्क बेनेफिट्स टू स्टूडेंट्स परफॉरमेंसः सिस्टेमेटिक रिव्यू. कंप्यूटर एंड एजुकेशन, 152.

- रोवाई, ए. पी. (2020). बिलिंडग सेंस ऑफ कम्युनिटी एट ए डिस्टेंस. इंटरनेशनल रिव्यु ऑफ़ रिसर्च इन ओपन एंड डिस्टेंस लर्निंग. Retrievedfromhttp://www.irrodl.org/index.php/ irrodl/article/view/79/152
- वोंग, (2005). प्रेलिमिनरी परसेप्शन ऑफ टीचर एंड लर्नर फेस टू फेस इंटरेक्शन. एग्जामिनेशन डिस्टेंस लर्निंग, 2(5), 7–1.

Educational Inclusion of Tribes in Higher Education with Reference to NEP 2020

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ABSTRACT

India is a land with rich in culture, religion, language, and races. Tribal communities in India make up a small percentage of the total population due to their indigenous culture, language, and way of life. In India, tribal people are marginalized, underprivileged, and deprived in various ways. They are still unable to enjoy the benefits of modernization and technological advancement. Only education could help them break free from centuries of oppression and take comfort in the sun of socioeconomic development. They can empower themselves, gain confidence, and overcome obstacles in their daily lives with the

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help of education. Our constitution contains several provisions for the advancement of tribal communities, but they continue to face numerous challenges. Despite several government initiatives to improve educational status since independence, the literacy rate among Schedule Tribes has remained low. Tribal representation in higher education falls short of expectations. The National Education Policy 2020 seeks to ensure inclusive and equitable quality education at all levels of schooling and higher education, as well as educational access. Now is the time to make bold decisions and devise effective strategies to remove barriers to education for tribal children. Apart from the government's initiative, tribals can only bask in the auroral radiance of economic development if various NGOs and local media play an important role in raising awareness among them. According to NEP 2020, while several programmatic interventions are currently in place to uplift children from tribal communities, special mechanisms must be put in place to ensure that these interventions benefit children from tribal communities. The goal of this paper is to examine the state of tribal education in higher education, as well as the constitutional provisions for tribal education. It also discusses about government programmes to promote educational inclusion of tribals and the challenges faced by the tribals and suggestions to achieve educational inclusion of tribals.

Key words: Tribes, Tribal Education, Educational Inclusion, Higher Education, NEP 2020

Introduction

India is a country that is multi-racial, multi-cultural, and multi-lingual. It is made up of different castes, communities, and social groups. A total of 574 tribes have been designated as Scheduled tribes. They are known as adivasis, or indigenous peoples of India. They have been variously labeled as aborigines, primitives, adivasis, vanajatis, and girijans. India has the most tribal people in the world, accounting for 9.7% of the total tribal population. In India, tribal communities are primarily concentrated in central and north-eastern India. They are the least developed region of the country. Tribes are socially, economically, politically, and educationally isolated from the

rest of society. Their way of life is drastically different. They are completely reliant on agriculture, forest products, and haunting. Because existing higher education institutions have limited resources, admission to them is competitive. Those competing for admission to higher education institutions suffer greatly due to disadvantages such as color, ethnicity, status, class, sex, and so on, despite the fact that they are treated equally in terms of opportunities. As a result, the scheduled tribes are granted a variety of facilities, privileges, and protections under our constitution. However, their level of development is significantly lower than that of non-tribal communities. Education has emerged as a key indicator of tribal development. Education, according to the development discourse, is the most legitimate and decisive means of social mobility for overcoming structural inequalities. Education as a means of increasing capacity, well-being, and opportunities on the periphery. Significant improvements in access and, to a lesser extent, quality of primary education have occurred in tribal areas as a result of government and non-government initiatives. The number of Scheduled Tribes students enrolled has increased from 21.6 lakh in 2019-20 to 24.1 lakh in 2020-21. This increase (11.9%) is significantly higher than the previous year's increase (4.3%). Notably, the overall increase in ST student enrolment since 2014-15 is 47.00%, according to the AISHE 2020-21 Report.

India is also committed to achieving the Sustainable Development Goals (SDGs) by 2030. The United Nations' motto for achieving the SDGs is "Leaving No One Behind," indicating the importance of including marginalized people and communities in SDG achievement. As a result, tribal peoples require a long-term development vision in which higher education plays an important role. Higher education would instill in stakeholders, i.e. tribals, the spirit of debate, inquiry, and rational thinking, allowing for faster and more comprehensive development. The establishment of tribal universities is critical in this regard. These would serve as catalysts for the spread of advanced knowledge by providing instructional and research facilities in tribal art, tradition, culture, language, medicinal systems, customs, forest-based

economic activities, flora and fauna, and technological advancements related to tribal natural resources.

Educational Inclusion of Tribes in India

Educational inclusion refers to the idea that every student, regardless of their background, abilities, or circumstances, has the right to a quality education and an equal opportunity to succeed. It involves creating inclusive educational environments that support the diverse needs of all students, including those with disabilities, ethnic minorities, and economically disadvantaged students. Educational inclusion efforts have been discovered to be a means of combating prejudices, biases, and discriminatory attitudes in society, and it creates a community in which educational opportunities are ensured for all segments of society. It is perceived to be defined in terms of social exclusion. The educational inclusion of tribes in higher education is an important issue that requires attention and action. Despite efforts by the government and educational institutions, tribal students are often underrepresented in higher education and face significant challenges in accessing and completing their education. Children from all socioeconomic backgrounds benefit from equitable educational opportunities in terms of academic, social, and psychophysical involvement and development. Everyone's feelings, experiences, and talents are valued in an inclusive social setting, and opportunities to develop their potentials and dreams are provided. In India, the majority of tribal children are not in school, are geographically and socially disconnected from mainstream society, and lack access to basic education, making ensuring tribal social inclusion in education a major challenge for the government. (Nambissan, 2006). Despite the fact that India advocates inclusive growth and that Although the Indian Constitution provides for reservations in education and employment for backward classes, there is still a lack of access to quality education and skill development. Even after seven decades of independence, tribal peoples continue to lag behind in development. In comparison to other communities, tribal students continue to have high dropout rates and illiteracy rates (Rupavath, 2016). Teaching tribal children presents unique challenges for teachers, policymakers, and administrators, particularly when the classroom includes children from both tribal and non-tribal cultures. It creates several difficulties and quandaries for teachers, such as the medium of instruction for tribal students and the adoption and assimilation of cultural practices. Policy interventions and initiatives to mainstream the tribal population have not resulted in the expected progress, with their participation in education and other development activities increasing at a snail's pace.

Higher Education and Tribes

Higher education is an important form of human capital investment. In fact, it can be regarded as a high level or specialized form of human capital, with a significant contribution to economic and social growth. Higher education can make a variety of contributions to development, including assisting in the rapid industrialization of the economy by providing manpower with professional, technical, and managerial skills. It shapes attitudes and enables the behavioral changes required for individual socialization as well as the modernization and overall transformation of societies. In India, the enrolment of tribal students in higher education institutions has been traditionally low due to several reasons, including lack of access to quality education, socio-economic and cultural barriers, and inadequate government support. However, in recent years, the government has taken several steps to address this issue and improve the participation of tribal students in higher education.

The Ministry of Education and the Ministry of Tribal Affairs have launched several initiatives to provide financial support, scholarships, and fee reimbursement to tribal students, as well as setting up of new tribal universities and colleges. Additionally, the government has also set up a tribal sub-plan (TSP) with the goal of allocating adequate resources for the education, health and development of tribal communities.

Despite these efforts, the enrolment of tribal students in higher education remains low, with only a small percentage of tribal students graduating from college. This highlights the need for continued government efforts and initiatives to improve the quality of education in tribal areas, and provide equal access to education for all communities. It is important to note that while progress has been made, there is still a long way to go in terms of achieving equality and inclusion in higher education for tribal communities in India.

Enrolment of Scheduled Tribes students has increased to 24.1 lakh in 2020-21 from 21.6 lakh in 2019-20. This increase (11.9%) is significantly higher than the increase recorded in previous year (4.3%). Notably, overall increase in ST Student enrolment since 2014-15 is 47.00% as per AISHE Report 2020-21. Gross Enrolment Ratio (GER) in Higher Education, estimated using population projections based on 2011 Census for the 18-23 age group among Scheduled Tribes it is 18.9.(AISHE 2020-21).

Constitutional Provisions for Tribal Education

In order to realise the objectives of equality and justice as laid down in the preamble itself, the constitution makes special provisions for the Scheduled Caste and Scheduled Tribes, the backward classes, the minorities and Anglo-Indian. According to Article 342 of the Constitution, the president has the authority to designate tribes or tribal communities, or parts or groups within them, as Scheduled Tribes in relation to a state or Union Territory.

Article 14: Equality before law and equal protection law.

Article 15: Discrimination on the basis of religion, race, caste, gender, or place of birth is prohibited.

Article 15(4): The state may make any special provisions for the advancement of SCs/STs.

Article **15(5)**: Except for minority educational institutions, the state has the authority to make any special provision for the advancement of SCs/STs in terms of admission to

educational institutions (including STs), whether public or private, aided or unaided.

Article 16: Equality of opportunity in public employment. Article 17: Abolition of Untouchability and prohibition of its practice.

Article 29: Protection of language, script, and culture of minorities through educational institutions including STs.

Article 46: Future leaders will be directed by a directive principle of state policy to promote the educational and economic interests of STs while also protecting them from social injustice and various forms of exploitation.

Article 350: The Constitution also gives right to every person to submit a representation for the redress of grievance to any officer or authority of the Union or a State in any of the languages used in the Union or in the States as the case may be.

Government Initiatives for Educational Inclusion of **Tribals in Higher Education**

The Central Universities are following the reservation policy of Government of India. However, the State Universities including their affiliated/constituent Colleges and other institutes are following the norms of percentage of reservation of SCs/STs as prescribed by the respective State Governments. In India, there are several government schemes and initiatives aimed at improving the education of tribal students and increasing their participation in higher education. Some of the major schemes include:

Top Class Education Scheme for ST Students: This scheme provides financial assistance to ST students to pursue higher education in prestigious institutions, both in India and abroad.

Maulana Azad National Fellowship for Minority Students: This fellowship is for minority students, including tribal students, who are pursuing higher education. The fellowship provides financial assistance to cover tuition fees and other educational expenses.

Tribal Sub-Plan (TSP): The TSP is a government initiative aimed at improving the socio-economic status of tribal communities, including their education. The TSP provides financial resources for tribal development, including the development of education infrastructure and the provision of educational opportunities for tribal students.

Scheme of Scholarship for College and University Students: Under the scheme, financial assistance is provided for pursuing higher studies to eligible meritorious students.

Interest Subsidy on Educational Loans: The Scheme's goal is to ensure that no one from the Economically Weaker Sections (EWS), including minorities, SCs/STs, women, and the disabled, is denied access to professional education solely because they are poor.

Rashtriya Uchchatar Shiksha Abhiyan (RUSA): The Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a mission-driven scheme that funds state universities and colleges in order to achieve the goals of equity, access, and excellence. The Scheme's goal is to increase access to higher education in states, particularly in Aspirational Districts, unserved and underserved districts. RUSA supports infrastructure development that is not directly beneficiary oriented and focuses on the creation of capital assets in the form of non-divisible infrastructure/resources.

Tribal Universities: In order to promote education in tribal-dominated areas, the Government of India, Ministry of Education, established the Indira Gandhi National Tribal University, Amarkantak in the state of Madhya Pradesh in 2007. Each state of Andhra Pradesh and Telangana will have one tribal university, according to the Andhra Pradesh Reorganization Act of 2014.

Other efforts are being made by the Government of India and the University Grants Commission, such as providing financial assistance to various deprived sections of society. Swami Vivekanand Single Girl Child Fellowship for Social Science Research; Post-Doctoral Fellowship for Women; PG Scholarship for SC/ST Candidates; National Fellowship for ST

Candidates; PG Scholarship for Professional Courses for SC/ST Candidates; and Post-Doctoral Fellowship for SC/ST Candidates. The UGC also contributes financially to the establishment of the Centre for the Study of Social Exclusion and Inclusive Policy, which will support focused research on the issue of social exclusion affecting dalits, tribals, and religious minorities. The UGC has also established SCs/STs cells in various universities in order to protect the interests of SCs/STs students.

NEP 2020 and Educational Inclusion of Tribals in Higher Education

The New Education Policy (NEP) 2020 is a comprehensive policy document aimed at transforming India's education system. The NEP aims to make education more inclusive, equitable, and accessible for all, including tribal students. It proposes a special focus on Socially and Economically Disadvantaged Groups (SEDGs). Bridging social category gaps in access, participation, and learning outcomes in both school and higher education will remain a major goal of all education sector development programs, according to the NEP 2020.

In the context of tribal higher education, the NEP focuses on the following key areas:

- Access to quality education: The NEP aims to increase access to quality education for tribal students, particularly in remote and under-served areas. This will be achieved through the setting up of new schools, colleges and universities in tribal areas, and improving the quality of existing institutions.
- Inclusiveness: The NEP aims to address the issue of low enrolment of tribal students in higher education by making education more inclusive and accessible. This includes providing scholarships and financial assistance to tribal students, and setting up special programs to support their academic and personal development.

- *Cultural preservation:* The NEP recognizes the importance of preserving and promoting the unique cultural heritage of tribal communities, and aims to incorporate their cultural practices and knowledge into the education system.
- Research and innovation: The NEP aim to encourage research and innovation in tribal higher education, particularly in areas that are relevant to the needs and concerns of tribal communities.

Overall, the NEP 2020 provides a framework for improving the status of tribal higher education in India, and ensuring that tribal students have access to quality education and opportunities for personal and academic growth. However, the implementation of these policies will require continued effort and commitment from the government and education stakeholders to ensure that the goals of the NEP are realized.

Challenges for Tribes in Higher Education

One of the major impediments to higher education is socioeconomic and cultural constraints. These socioeconomic and cultural factors can be summarized broadly as follows:

- poverty and deplorable economic conditions
- · social customs
- cultural ethos
- a lack of awareness and understanding of the importance of formal education
- a geographical divide between the home and educational institutions

Agriculture is the main source of income for tribals, which they do either through shifting cultivation or terrace cultivation, both of which have low productivity. As a result, the older children play an important role, contributing to family income directly or indirectly through family occupations and household tasks such as cattle grazing and fuel and fodder collection, among other things. It should be noted that tribals' impoverished economic status makes even minor private expenditures for writing materials, clothing, and other

necessities a significant burden on the family. Another reason

for low participation is the opportunity cost, as the majority of non-enrolled children, both young and old, are required to work in households or family occupations. They undoubtedly facilitate parental participation in economic activity. Another major impediment to tribal education promotion and participation is poor health. Contagious diseases such as scabies, eye infection, malaria, and diarrhoea are common in tribal areas, and as a result, tribal children's attendance at educational institutions suffers. Furthermore, some tribal communities are seasonal migrants, which causes student absenteeism and makes it difficult for them to effectively benefit from education.

Suggesstions

Education is the most effective tool for individuals and society to increase capacity, overcome barriers, and expand opportunities for well-being. The government has made several efforts to improve education by expanding special educational facilities and implementing various educational policies and programs at the federal and state levels. However, there is a problem in the development of education in tribal communities. As a result, there must be investment in developing support mechanisms to supplement tribal children's integration into the formal education system. It is critical to establish tribal universities and higher educational institutions near tribal habitations. Good road and rail connectivity would allow them to continue their education. Human Resource Development is at the heart of any development strategy.

Tribals should be given small financial packages as health and educational incentives. They must be informed about the long-term advantages of education and encouraged to pursue it. Rather than quantity, the emphasis should be on quality and equity, as in the past. The primary goal should be to provide high-quality education that assists tribal communities in becoming economically self-sufficient. It has been repeatedly stated that no concrete steps have been taken to provide tribal students with locally relevant material. The availability of locally relevant materials will not only speed up learning but will also help to develop their interest in education. Building partnerships between the community and the government is critical to making education effective and sustainable. Community partnerships not only supplement state education spending, but also ensure supervision and monitoring, addressing a vexing problem for the state, according to the findings of pilot projects in Andhra Pradesh. (Sujatha – 2002. Environmental development is critical in the context of tribal community educational development. Community awareness and mobilization, as well as orientation about scholarship programs, should be given adequate importance and attention.

Conclusion

The key to tribal development is higher education. However, tribal students are underrepresented in higher education. The country's tribal students are not performing well in higher education. Education which determines the future of our country, must be regarded as a non-exclusive and nonrivalrous public good. Any educational vision that does not begin with inclusivity is elitism. However, in the twenty-first century, tribal educational endeavors that potentially aim to bring the latter into the mainstream of development face complex challenges. According to NEP 2020, while several programmatic interventions to uplift children from tribal communities are currently in place, special mechanisms must be put in place to ensure that children from tribal communities benefit from these interventions. As much as possible, emphasis should be placed on implementing existing policies, schemes, and initiatives with direct stakeholder participation, namely the tribal community. Furthermore, economic incentives and life skill education should be provided to tribal members based on their family's economic situation. improving the educational inclusion of tribes in higher education requires a comprehensive and sustained effort by the government, educational institutions, and the community. By working together, it is possible to ensure that tribal students have access to quality higher education and the opportunity to succeed. Improving the educational inclusion of tribes in higher education requires a comprehensive and sustained effort by the government, educational institutions, and the community.

REFERENCES

- AISHE (n.d.). All India Survey on Higher Education 2020-21. Retrieved February 11, 2023 from https://aishe.gov.in/ aishe/BlankDCF/AISHE%20Final%20Report%202020-21.pdf
- Das, R.K & Das, R.S (1955). Census of India, 1951-2001. India's Submerged Humanity in Modern Review. New Delhi: Mittal Publication.
- Elwin, V. (1944). The Aboriginals. Bombay: Oxford University Press. Ghurye, G.S. (1963). The Mahadev Kolis. Bombay: Popular Prakashan.
- Justice, S. (n.d.). Department of Social Justice and Empowerment. Ministry of Social Justice and Empowerment. Retrieved February 11, 2023 from https://socialjustice.gov.in/
- MHRD (n.d.). National Education Policy. Retrieved February 11, 2023 from https://www.education.gov.in/sites/upload_files/ mhrd/files/NEP_Final_English.pdf
- Ministry of Education (n.d.). Major Initiatives. Department of Higher Education. Retrieved February 11, 2023, from https:// www.education.gov.in/en/higher_education
- NIC, L. P. (n.d.). Major Initiatives. Ministry of Education. Retrieved February 11, 2023 from https://www.education.gov.in/en/ annual-report-2020-2021-moe-english
- Risley, H.H. (1915). Statistical Profiles of Scheduled Tribes of India.
- Samvaad, D. (n.d.). Ministry of Tribal Affairs. Government of India. Retrieved February 11, 2023 from https://tribal.nic.in/
- Sujatha, K. (2002). Education among Scheduled Tribes. In Govinda R. (ed.), India.
- United Nations Human Right (2011). United Nations Declaration on the Rights to Development. Retrieved from http:// www.ipu.org/splz-e/unga14/rtd.pdf.
- Xaxa, V. (2005): Politics of Language, Religion and Identity: Tribes in India. *Economic and Political Weekly Journal*.
- Yadappanavar, A.V. (2003). *Tribal Education in India*. New Delhi: Discovery Publishing Group.

Financial Literacy: Provisions for Improving SHGs Women's in M.P

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ABSTRACT

In the current scenario, women are beginning to distinguish themselves in various fields. The outstanding contributions made by women are becoming more and more critical to society and the economy as a whole. Financial literacy abilities to help someone become financially stable. Financial practices greatly benefit from budgeting, tracking expenses, paying off debt, and retirement planning. The primary prerequisite is the ability to make rational decisions and choices regarding the use and management of money. Due to a lack of financial literacy and the failure to inform women of the benefits provided by the Indian government, previous literature on financial literacy found a daunting magnitude more prevalent in men than in women. To better a nation's economic standing and make their own financial decisions in daily life, both men and women should be financially educated. Compared to males, women do worse when

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handling money and are less financially savvy than men. This paper aims to conceptually aid in analyzing the current status of financial literacy among women by elucidating its present scenario, and the challenges set ahead. The efforts that should be done to address these issues are continually brought up with the importance of financial literacy.

Keywords: Financial literacy, women, lack of knowledge & economic growth

Introduction

Financial literacy is understanding economic trends and how to implement them in real life, such as personal finance, budgeting, and savings. Financial literacy can help people avoid bad financial decisions and achieve financial stability independently. Basic financial skills include budgeting, tracking expenses, paying off debt, and planning retirement. It's about learning how money works, setting and achieving financial goals, becoming aware of illegal financial practices, and supporting the economic challenges of everyday life. More and more financial products are gaining attention, including (Lusardi, 2019) alternative financial services such as payday loans, pawnshops, and rental businesses that impose very highinterest rates. At the same time, in a changing economic climate, people are increasingly responsible for their financial plans and investments and the use of their resources throughout their lives. The benefits of financial literacy help you understand the value of money. When we know the value of money, we can better manage our finances by understanding the importance of budgeting, saving, and avoiding unnecessary spending. Financial literacy prevents us from becoming debt-enslaved people and empowers us to invest and generate wealth. They generally educate us about how to invest money, and generate wealth, and prevent us from making bad financial decisions. Ponzi schemes and gambling do not easily tempt people with financial literacy because they understand the value of money and how difficult it is to make it. Since ages of time, the world has been dominated by men, who run the society and women blindly follow them. But women are the basis of humanity;by making them literate, the entire family becomes literate. In earlier days, women were treated inferior to men as they were supposed to take care of the household chores, be a perfect homemakers and raise the family only. In modern society, too, women are on a majority basis under the influence of parents until marriage and switch over to being under the control of their husbands after marriage. Still, some women are given the right and freedom to express their likes and dislikes and aspire to become someone eminent that society recognizes as an individual. Now, determined women continue to strive to hold a prestigious position in anti-social elements like dowry, domestic violence, sex-selective abortion and so on, though the percentage is minimal.

The biggest and most significant challenge for our country is making women feel empowered at home and in society by giving her the status of honour and respect through education and making her feel more independent than dependent. To encourage and empower women, the government has taken various steps by establishing self-help groups such as Swayamsidha Program to provide them accessibility to become aware of specific welfare programmes and also enhance their skills. Compared to men, women are much more talented in financial planning, budgeting and managing household expenses. But when it comes to a larger part of decision-making concerning investment and handling more significant finances, they take a back step as the men in the house generally take the upper hand and also believe that their husband, father or brother can do a better job compared to them. Since they are kept at the back bench in such aspects, in times of divorce, widowhood etc, they struggle to handle the sudden situation. Basic financial literacy knowledge is essential for women, enabling them to make decisions about savings and investments and helping them lead happy life with their entire family.

Hasibuan, Lubis, & Altasani (2017) concluded that financial satisfaction is positively influenced by economic behaviour and can be considered an essential component of financial satisfaction and individuals who possess positive financial

behaviour experienes a higher level of financial satisfaction and also encourages better financial condition in the future. Isa, (2021) in their study in UNTAR concluded that financial satisfaction does not have significant effect on financial behaviour i.e., financial behaviour is not significantly effect by the satisfaction level of individual's financial condition in managing assets, debt and saving but financial knowledge and financial confidence have significant influences on financial behaviour. Aravena, et. al., (2022), in their study among people aged between 19 to 29 in Malasiya concluded that financial behaviour has a significant positive indirect relationship between subjective financial knowledge and financial wellbeing, where also financial behaviour found to have substantial direct relationship with economic well-being.

The Gap of the Study

Almost all prior study exploring the assoiciation between financial satisfaction and financial behaviour are conducted in western country, yes there is some study available that have measured financial behaviour, financial literacy, financial knowledge and there association but may be there is no or significantly less study in India that have explored association of financial behaviour and financial satisfaction. This study will fill this gap and explain the type of association between them in the Indian context.

Every individual desires to be financially fulfilled regarding financial constraints, which can be achieved through strategized finance management. Good management of consumer credit help in better level of financial satisfaction i.e., judicious use of debt can increase consumer utility (Lown, & Ju, 1992). Financial satisfaction is one key variable that describes the individual's perception of their current financial situation (Ali, Rahman, & Abd Bakar, 2015). Financial satisfaction is derived from someone's behaviour that is associated with the management of a person's revenues to meet their financial needs; that said to be successful if the person can meet all their short and long-term needs without any slightest deficiency (Arifin, 2018).

The purpose of this paper is to conceptually picture the present state of financial literacy among women working in SHGs in Madhya Pradesh, identify the challenges or hurdles that curtail them from becoming financially able, and channelize feasible solutions to overcome those challenges. Hence, this paper certainly creates a primary perception of financial literacy among women in M.P.

Scenario of Financial Literacy Among Women in India

Financial literacy is a country's asset that defines the country's economic status. India is a multicultural and multilingual country with a population of 1.40 billion in 2022, with 27.6% of the population potentially one of the top financial literacy countries in the world (India's Growing Financial Literacy, 2022). The world's largest country with diverse people, its literacy rate on the whole scores 79% compared to the countries worldwide, according to UNESCO. This explicitly narrates that most Indians can read and write but have less access to education. As per NSS 75th Round (July, 2017- June, 18), 41.2 % of females in the age group 3 to 35 years are attending education and this percentage for males is 46.2 %. In the age group 3 to 35 years, 16.6 % of females are never enrolled, while 11.0 % of males are not (Kempaller, 2022). Due to lack of primary education, the numerical abilities among women are poor, which restrict them from properly analyzing financial information caused poor financial planning, ultimately affecting their saving & investment decisions and the family's well-being as a whole (Singh & Kumar, 2017). It is, therefore, highly perceived that men in India are more literate than women and it is vital to make them financially more and literate.

In some instances, even after women are allowed to make financial decisions as men, they struggle to become financially literate due to cultural differences, economic well-being and psychological and physical inabilities. This has brought them to the state of attaining inadequate knowledge even in the operations of gaining primary exposures in financial aspects such as,

- How to use an ATM card?
- How to trade with UPI?
- How to deposit money using Bank Challan?
- How to fill in the loan application?
- How to compare and choose the right loan product?
- How to get insurance?
- How are various transactions conducted in the stock market?
- How is the pension plan distributed?
- How to file a complaint with a financial service provider?
- How to detect fake phone threats in your finances?
- With whom can the financial information be shared with? and much more.

In India, there are barriers faced by women in the name of society and culture as we are in the times where women seek opportunities on par with men, aspiring to have big dreams in life and create a better place for themselves and their families around them. But women leaving home for work are viewed as irresponsible people who don't care about the family and home. To add more, their earnings go to the spouse and they have forbidden the right to enjoy their earnings according to their choice. These barricades have brought down the value of women in part-taking in financial inclusions even though they have acquired the least awareness of it and struggling to prove themselves concerning it. MSMEs in Indian economy employ millions of men and women nationwide. However, women make up only 13.76 percent of all Indian entrepreneurs although the number of male entrepreneurs exceeds 50 million. But, the number of female entrepreneurs is estimated to be only about 8 million (MSME, 2021). According to the report made in FY21, the number of MSME's led by women has shown an improvement to 7% since FY11. The point is, is this 7% a fair growth for a span of 10 years? Much financial fraudulence has been reported due to being financially illiterate. The major cause is a lack of knowledge about what to share? When to share? Why to share? Whom to share? People tend not to realize the consequences of financial illiteracy and lose a lot of money, and such behaviours have psychological implications.

Challenges of Financial Literacy

In India, nearly 62% of women are financially illiterate compared to 38%, which easily means that women are less educated in handling finances than men. Studies also disclose the status of not having bank accounts or access to bank services (Aanchal, 2021). Women in India are raised in an environment where they are taught to believe that matters concerning financial decisions and investment are man's space of task. Surveys opine that close to 33% of women make investment decisions individually than 64% of men who do so (Gupta, 2022). India's Growing Financial Literacy, (2022) educating women with financial literacy will gradually reduce the risk rate of personal finance. The major reason is a lack of adequate knowledge, and women are not used to financial handling, they are not involved in financial practices, so they tend to get deceived easily. Even though India is a developing country, there are many regions where women are considered weaker sex and not provided with an adequate education.

In many households' women are considered to be harmonized for household work and inadmissible in financial handling, this is the major reason why homemakers are not aware of financial Literacy. They have limited access to financial literacy classes and education, leaving them unprepared. The majority of Women follow the indigenous method of financial planning and they are not aware of modern practices of budgeting and personal financial planning and execution and the new financial instruments available in the modern financial markets. Maiya, (2020) as they repudiate their own opinion on financial aspects and are subjected to follow the financial tasks accomplished by their neighbors without discounting the needful aspects. The prime reason for slow growth for womenled MSME's are unconscious biases, challenges in accessing finance and building own network, lack of safety in public spaces, sometimes not getting enough support from family, lack of child-care options, often lack confidence in their skills in business and so on (Soni, 2021). The government initiatives provided are not properly utilized and the time taken to deliverenterprises in rural areas are much lesser than that of an urban area which led to a lag in understanding the new financial trend i.e., when an urban population was opted to adopt a new financial technology and initiative, rural population pertained to adapt the antiquated financial technology. The literacy rate of India in 2021 is 74.04%. The Male literacy rate is 82.14% and the female literacy rate is 65.46%, according to Census 2021. Literacy rate of India, (2021) the female literacy rate is far lower compared to male literacy rate due to these women who are inerudite face hassle in understanding financial trends, in using automated teller machines and cash deposit machine, filling bank challan's, in the reading procedures that is posted for awareness.

Despite vetting the financial facts women tend to indiscriminately believe the phenomenon stated by an unscrupulous medium such as loan sharks, extortioners, Shylocks. Due to this, they are bankrupted, and also suffer from deprivations. Since many women are unfamiliar with nominal wage standards, they are consequentially made to work three times more and are underpaid compared to men.

Measures to Overcome Challenges

- Women must be recognized by their family and society.
 This will undoubtedly pave the way for them to become more confident and not hesitate to make decisions concerning finance.
- The society must develop a broader way of thinking enabling women to become empowered and selfdependent than dependent on a male family member.
- Financial literacy should be added to the school curriculum for better effectiveness.
- Proper education should be given to all age groups people.

- Women should be counted-in financial handling as the same as men, there should be no gender gaps.
- Entertainment media plays a crucial role since it has colossal coverage over people when compared to any other medium. People are more attracted to visual demos rather than paper pamphlets
- Self-education is mandatory for analyzing cash flows in day-to-day life, effective management of money, avoiding unnecessary debts, and financial phishing.
- Women mainly lack confidence to take over financial handling in every household, this situation should be changed and they should be confident enough to handle personal finance.
- The major reason women were not involved in financial operations was because they are scared of process and hesitate to invest, to overcome these, financial organisations should provide them proper monetary security so that they believe in process and invest.
- Financial literacy depends heavily on how one manages one's money and how efficiently financial resources are used for the growth and well-being of oneself, the business, and the whole family. The initiatives taken by the government, persist in creating a drift in the financial literacy level of women. Therefore, more women-specific financial literacy programs are needed to be introduced.
- Financial inclusion needs to be universal so that women can learn about financial functions and not face difficulties in financial processes such as credit and debit services, savings services, insurance, and pension schemes.

Conclusion

As India is a developing country every citizen has to be aware of financial literacy, and know the means and how their money is spent in their day-to-day activities. Every person wants to be financially content while having financial limitations, which may be done by strategically managing finances. Good credit management, or the prudent use of debt, can raise consumer utility and lead to higher financial happiness. Numerous studies show that India has a low level of financial literacy, particularly among women, the elderly, and young people who struggle with even the most basic finacial concepts. It is concluded that inescapable effort is needed to attain a stability in financial literacy among women, the financial growth of women benefits not only the government but also their economic value, not only women but even men should also be aware of financial standards to reduce phishing rates in India.

REFERENCES

- Ali, A., Rahman, M. S. A. & Bakar, A. (2015). Financial satisfaction and the influence of financial literacy in Malaysia. *Social Indicators Research*, 120, 137-156.
- Arifin, S. R. M. (2018). Ethical considerations in qualitative study. *International Journal of Care Scholars*, 1(2), 30-33.
- Castellanos-Alvarenga, L. M., Denegri-Coria, M. & Sepulveda-Aravena, J. (2022). Relationship between Subjective Financial Knowledge and Financial Well-Being: The Mediating Role of the Financial Executive Function. *Revista de Cercetare si Interventie Sociala*, 78.
- Census of India (2021). Literacy Rate of India. Retrieved from https://censusofindia2021.com/literacy-rate-of-india-2021
- Dansby, S. R. (2000). *Foundations of Financial Literacy* (11 ed.). The Goodheart-Willcox Company, Inc. ISBN 978-1-64925-019-3.
- Gupta, A. & Das, P. (2021). Here's To Embracing Financial Literacy In 2021. FII Media Private Limited. Retrieved froms https://feminisminindia.com/2021/01/20/financial-literacy-womeninfinance/#:~:text=Or%20so%20we%20hope!, limited%20access%20to%20 banking% 20service
- Gupta, P. R. (2022). *Having a financial plan is more critical for women than men*. Live mint. Retrieved from https://www.livemint.com/money/personal-finance/-having-a-financial-plan-ismore-critical-for-women-than-men-11602470743033.html

- India Brand Equity Foundation (2022). India's Growing Financial Literacy. Retrieved from https://www.ibef.org/blogs/india-s-growing-financial-literacy
- India Brand Equity Foundation (2022). *India's Growing Financial Literacy*. Retrieved from https://www.ibef.org/blogs/india-s-growing-financial-literacy
- Isa, A. H. (2021). The Andragogy-Based Learning Model to Increase Functional Literacy Learning Motivation. *ARTIKEL*, 1(6746).
- Jayanthi, M. (2019). Determinants of rural household financial literacy: Evidence from south india. *Statistical Journal of the IAOS*, 35(2), 1-6. DOI:10.3233/SJI-180438
- Jha, J. (2020). *Financial Literacy and its importance*. The Hans India. Retrieved from https://www.thehansindia.com/business/financial-literacy-why-it-is-important-700499
- Kempaller, D. S. (2022). Women Empowerment in India: A Sociological Study. *IJARIIE*, 8(2), 955-961.
- Lown, J. M. & Ju, I. S. (1992). A model of credit use and financial satisfaction. *Financial Counseling and Planning*, 3(1), 105-124.
- Lusardi, A. (2019). Financial Literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*. Retrieved from https://doi.org/10.1186/s41937-019-0027-5.
- Maiya, U. (2020). Financial Literacy among rural women: A study with reference to kundapur taluk. *Journal of Interdisciplinary Cycle Research*, 12(3).
- McGurran, B. (2022). *Personal Finance*. Retrieved from https://www.experian.com/blogs/ask-experian/what-is-financial-literacy-and-why-is-it-important
- MSME (2021). Schemes For Empowering Women Entrepreneurs. Team MSMEx. Retrieved from https://www.msmex.in/learn/important-schemes-for-women-entrepreneurs
- Program, U. N. (2012). Financial Literacy as a tool for financial inclusion and client protection. (UNDP, Ed.). EII Gee. Retrieved from https://www.undp.org/content/dam/india/docs/poverty/financial-literacy-as-a-tool-for-financial-inclusion-and-client.pdf
- Reserve Bank of India. (2007). Financial Literacy Material FAME Booklet. Reserve Bank of India's Financial Education Initiative.

- Retrieved from https://www.rbi.org.in/Financial Education/fame.aspx
- Sandra Braunstein, C. W. (2002). Financial Literacy: An Overview of Practice, Research, and Policy. 88, 1-13. DOI: 10.17016/bulletin.2002.88-11
- Singh, C. & Kumar, R. (2017). Financial Literacy among Women Indian Scenario. *Universal Journal of Accounting and Finance*, 46-53. DOI: 10.13189/ujaf.2017.050202
- Soni, S. (2021). Women's Entrepreneurship Day: Why only 20% of India's over 6 crore MSMEs are led by women? Financial Express. Retrieved May 29, 2022 from https://www.financialexpress.com/industry/sme/msme-eodb-womens-entrepreneurship-day-why-only-20-of-indias-over-6-croremsmes-are-led-by-women/2372108
- Youth Financial Literacy Foundation: https://www.yflfoundation.org/blog/rqngrkko34859 ezmheafu09 retwkch-batzk-c9zh3

Greater Opportunity for Individual Employment (Women's Employment Status In India)

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ABSTRACT

India's economy has undergone a substantial transformation or the country's independence. Agriculture now accounts for only one-third of the gross domestic product down, and a wide range of modern poultries and support services now exist. In spite of these changes, agriculture continues to dominate employment, employing two-thirds of all workers. India faced economic problems in the last few years that were acerbated by the Crisis. India began to implement trade liberalization measures. Different sectors of economy have different experiences about the impact of the reforms. In a country like India, productive employment is central to poverty reduction strategy and to bring about economic equality in the society.

Still women are able to get more jobs but the work they get is and elevated status arising out of increased chances to work contradictory more casual in nature or is the one that men do not prefer to do or is left by them to move to higher or better jobs Globalization has indeed

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raised hopes of women for a better situation where they have the label of economically independent but, at the same time, it has put them in a paid workers but are not able to enjoy their economic liberty in real sense of the term.

India is the first among countries to give women equal franchise and has a highly credible record with regard to the enactment of laws to protect and promote the interests of women, but women continue to be denied economic, and legal rights and privileges. Though they are considered to be equal partners in progress, yet they remain subjected to repression, marginalisation and exploitation. It has bee advocated by many researchers that independent earning opportunities reduce the economic power in the family. This bargaining power depends on the nature of work she is employed in. But the income earning activities increase the workload of a woman unless the man accepts an increased share in domestic work. Since globalization is introducing technological inputs, women are being marginalized in economic activities, men traditionally being offered new scopes of learning and training. Consequent female workers are joining the informal sector or casual labor force more than ever before. For instance, while new nice technology has given rise to higher use of female labor, the increased work-load for women is in operations that are unrecorded, and often unpaid, since these fall within the category of home production activities. The weaker sections, especially the women, are denied the physical care they deserve There is, thus, hardly any ability for the majority of Indian women to do valuable functioning; the "capability" to choose from alternatives is conspicuous by absence.

The economy in one form or another, much of their work ant documented or accounted for in official statistics. Women pse fields and harvest crops while working on farms, women and make handicrafts while working in household women sell food and gather wood while working women are traditionally the informal sector. Additionally, dustiest, possible for the daily household chores). Although the cultural restrictions women face is changing, women are all not as free as men to participate in the formal economy. In the past cultural restrictions were

the primary impediments female employment now however, the shortage of jobs throughout the country contributes to low female A employment as well. Since Indian culture hinders women's access to jobs in stores, factories, and the public sector, the informal sector is particularly important for women. More women may be volved in undocumented or "disguised" wage work than in the formal labor force. There are estimates that over 90% dworkingwomen are involved in the informal sector and not included in, official statistics. The informal sector includes such as domestic servant, small trader, artisan, or field rer on a family farm. Most of these jobs are unskilled nd low paying and do not provide benefits to the worker.

Status of Women in India most developing countries. The public sector hires a greater de of women than does the private sector, but wages in public sector are less egalitarian despite laws requiring A pay for equal work. There is evidence that suggests at technological progress sometimes has a negative impact women's employment opportunities. When a new technology is introduced to automate.

When the village replaced manual irrigation system with a tube well irrigation stem, women lost their jobs. Many other examples exist here manual tasks such as wheat grinding and weeding e replaced by wheat grinding machines, herbicides, a modern technology. These examples are not meant suggest that women would be better off with the menial rather they illustrate how women have been pushed of traditional occupations. Women may not benefit from s created by the introduction of new technology. New is usually go to, and it is even rare for women to be employed in the victories producing such equipment. National Sample Survey tata exemplify this trend.

Many other examples exist here manual tasks such as wheat grinding and weeding e replaced by wheat grinding machines, herbicides, and er modern technologies. These examples are not meant suggest that women would be better off with the menial rather they illustrate how women have been pushed of traditional occupations. Women may not benefit from s created

by the introduction of new technology. Other data force the conclusion that employment options for female gricultural workers have declined, and that many women ek casual work in other sectors characterized by low wages and low productivity. Other agricultural work includes arkers involved with livestock, forestry, fishing and ting, plantations, orchards, and related activities.' an important role in the maintenance of the household Indian culture women are expected to devote virtually all their time, energy, and earnings to their family. Many women still sought their husbands permis when they wanted to purchase something for themselves. In northern India, where more stringent cultural are in place, it is likely that few women control family finances. Conditions of working women in India have improved considerably in the recent years.

Ironically, the improvement in their status, they still find themselves dependent on men. It is because of the fact that ma patriarchal society has always wielded economic independent and power to take decision. Since the working woman has an independent income in the same patriarchal set-up, when the basic infrastructure of society has hardly changed though her own role within the same structure is passing through a transitional phase, it is but natural that would remain vulnerable to exploitation even in he economically independent state. Society perhaps yet ne to accord due recognition to women to take the lead rural and women, at the same time;

An important role in the maintenance of the household Indian culture women are expected to devote virtually all their time, energy, and earnings to their family. Men, on t other hand, are expected to spend time and at least some Research higher share of their earnings on activities outside the household has shown that women contribute a earnings to the family and are less likely themselves. Research has suggested that as the share of s family income contributed by woman increases, likelihood that she will manage this income. However, extent to which women retain control over their own income varies from household to household and region to region to spend it.

Conclusion

Many women still sought their husbands permits when they wanted to purchase something for themselves In northern India, where more stringent cultural r are in place, it is likely that few women control family finances. Conditions of working women in India have improved considerably in the recent years. Ironically, despe the improvement in their status, they still find themselves dependent on men. It is because of the fact that ma patriarchal society has always wielded economic independent and power to take decision. Since the working woman earn an independent income in the same patriarchal set-up, when the basic infrastructure of society has hardly changed though her own role within the same structure is passing through a transitional phase, it is but natural that would remain vulnerable to exploitation even in he economically independent state. Society perhaps yet ne to accord due recognition to women to take the lead. Rural women, at the same time; need to be oriented towards assuming this role in the society. Restrictions

REFERENCES

News papers Gopu Sudhakar(n.d.). Pioneer of women empowerment.

Mathematical Modelling: A Pedagogical Tool for Competency-Based Learning

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ABSTRACT

Mathematical modelling attempts to study some part of the reallife problem in mathematical terms. It refers to a complete process of 'mathematization' of context from the real world, i.e., the process of constructing a mathematical model to solve problems from the real world. It is a way of teaching mathematics that is more interactive and student-cantered. It uses real-world situations to foster an understanding of mathematical concepts and provides a method for a better understanding of real-world situations. Mathematical modelling is a powerful tool that can be used to enhance competency-based mathematics education. With the rise of technology and computers, new mathematics teaching methods have become available. One such approach is mathematical modelling, which is a powerful tool used to help students in developing problem-solving skills, to mathematical competency and gain an understanding of complex mathematical

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problems. Competency-based learning encourages self-directed learning and the exploration of real-world applications of mathematics. It also encourages a greater emphasis on problem-solving and developing the ability to apply mathematics to everyday life. The goal of competency-based mathematics education is to help students become confident, creative, and active mathematical thinkers who can solve real-world problems. This article advocates how mathematical modelling can be used in mathematics learning and why it is an important tool for competency-based mathematics learning.

Keywords: Mathematical Modelling, Competency-Based Education, Mathematics Education

Introduction

The rapid advancements in information and technology have led to a significant shift in societal expectations and the education system. The current world demands that mathematics teachers equip their students with the necessary skills to create practical solutions to real-world problems while demonstrating how mathematics can be effectively applied in their daily lives. In doing so, students can develop an appreciation for the importance and power of mathematics, thus fostering a love for the subject rather than a fear of it (Arseven, 2015). As a result, this process of development and change has led to a renewed search for innovative approaches, methods, and models in the education system. One such approach is mathematical modelling, which has emerged as a powerful tool in helping students to develop problem-solving skills, mathematical competency, and a deeper understanding of complex mathematical problems (NCERT, 2006).

By embracing mathematical modelling as an approach, mathematics teachers can create a learning environment that empowers students to take charge of their education and develop critical thinking skills that they can apply outside of the classroom. Students can engage in hands-on activities that encourage them to think creatively and analytically, working collaboratively to develop effective solutions to complex problems. Overall, as society continues to evolve, so must the

education system. Mathematics teachers are responsible for adapting and providing students with the skills and knowledge they need to succeed in the modern world. By embracing new approaches such as mathematical modelling, educators can help their students to develop a deeper understanding and appreciation of the power and importance of mathematics in their lives.

Conceptual Orientation

Mathematical modelling involves the exploration of real-world problems using mathematical concepts and formulas. By converting real-life situations into mathematical expressions, mathematical modelling provides a more comprehensive representation and solution to various problems. The conversion process is known as mathematical modelling. In essence, mathematical modelling entails transforming a real-world problem into an equivalent mathematical problem, which is then solved using mathematical techniques. The solution obtained is then interpreted in the context of the original problem to determine its applicability and effectiveness.

The process of mathematical modelling is a crucial aspect of problem-solving in various fields, including engineering, economics, biology, physics, and social sciences. It enables researchers and professionals to develop accurate predictions, identify potential issues, and design effective solutions. Mathematical modelling involves various steps, including identifying the problem, gathering relevant data, selecting appropriate mathematical techniques, formulating the problem mathematically, solving the mathematical problem, and interpreting the results. Each of these steps is critical in ensuring the accuracy and relevance of the solution obtained. Thus, mathematical modelling is an essential tool for solving realworld problems in various fields. It enables researchers and professionals to represent complex systems in mathematical terms, obtain accurate solutions, and evaluate the effectiveness of their solutions in the context of the original problem.

In the context of mathematics education, mathematical modelling can be used to enhance students' understanding of core mathematical concepts, as well as to help them apply those concepts to real-world problems (Hidayat, et al., 2022). It is a way of teaching mathematics that is more interactive and student-centered. It is based on the idea that mathematical concepts can be presented to students in a way that is more accessible and meaningful. It is a method that is used to help students understand how mathematics can be used in their everyday lives in a more practical way.

The process of mathematical modelling offers a practical approach to comprehending real-world situations more effectively.It is defined as a cyclic process that involves translating from mathematics to reality and vice versa (Lesh & Doerr, 2003; Blum & Leiß, 2006; Kaiser & Sriraman, 2006; Niss et al., 2007). The modelling practice finds various applications in mathematics education, each catering to specific objectives and aims. One such approach is mathematical modelling, which involves using real-world scenarios to aid students in comprehending complex mathematical concepts. Mathematical modelling provides a practical and engaging context for students to apply mathematical principles and theories to realworld problems. By using relatable examples, students can better visualise and understand abstract concepts, making the learning process more accessible and enjoyable. This approach to mathematics education is particularly effective in promoting critical thinking and problem-solving skills. By presenting students with real-life scenarios, they are challenged to analyze and interpret data, formulate hypotheses, and develop strategies to solve complex problems. These skills are invaluable in various professions, making educational modelling an essential component of mathematics education.

On the other end of the spectrum is realistic or applied modelling that aligns with PISA objectives (Giberti & Maffia, 2020). PISA, the Programme for International Student Assessment of the Organization for Economic Co-operation and Development (OECD), is one of the well-known assessment

tools for mathematical modelling. Mathematical modelling is a powerful tool that can be used to enhance competency-based mathematics education (Abassian et al., 2020). Since 2012, the modelling cycle has been particularly emphasised in PISA as an additional reporting category for student proficiency (Stacey, 2015). The applied modelling view is more pragmatic, claiming that abstract mathematics can be exploited to understand real-life situations better. In this approach, the modelling process emphasises the authentic aspect of the problem, thus presenting to the students the challenge of using mathematics in the way it may be used in life outside school (OECD, 2013).

Competency-based education (CBE) is an instructional approach that prioritises the student's needs and is based on constructivist philosophy, 21st-century skills education, and adaptable learning models. In contrast to traditional teaching methods, CBE teaching methods are characterised by pacing, structure, and objectives differences. The end goal is not for students to "cover the content," pass a test or prepare for college or a specific career, but rather master skill sets that will allow students to pursue their goals successfully, no matter what they choose to do in life (McGehee, 2021).

Mathematical modelling is a tool for competency-based mathematics education because it helps students to understand the real-world application of mathematics (Albarracin, 2020). It allows students to develop the skills and knowledge required to solve real-world problems using mathematics. It also encourages students to think critically and analyze the issue at hand. Mathematical modelling allows students to develop problem-solving skills and a deeper understanding of mathematics and its applications. By providing students with an opportunity to practice applying mathematics to real-world problems, mathematical modelling helps students to become more competent in mathematics (Ministry of Education, 2020). Furthermore, it encourages students to become more creative and self-reliant in their approach to mathematics, as they can come up with their own solutions to problems (Nuryadi, 2021). Ultimately, mathematical modelling helps students to gain a better understanding of the subject and to become more confident in their mathematical ability. By providing a visual representation of the mathematical concepts, the student is better able to understand how the mathematical ideas work in practice (Shahbari & Tabach, 2020).

In addition, the use of mathematical models can help to provide a more accurate prediction of real-world scenarios, enabling students to understand the implications of their decisions and to make better-informed decisions. Mathematical models can also help to identify patterns in data and to identify relationships between different variables. This can help students to develop an understanding of the underlying causes of certain behaviors and can help them to identify potential solutions to problems. Finally, mathematical models can also help to simulate and predict the outcomes of different scenarios and to identify areas of risk and opportunity (Riyanto et al., 2017). For example, a model could be used to analyse the potential impact of new technologies on a market or to predict how a certain policy might affect the economy over a certain period of time. By using mathematical models, it is possible to assess the potential risks and rewards of different scenarios and make informed decisions.

Mathematics is an essential skill for success in all walks of life. It refers to a complete process of 'mathematization' of context from the real world, i.e., the process of constructing a mathematical model to solve problems from the real world (NCERT, 2005). As technology continues to grow, so too does the need to have a good understanding of mathematics. To meet this demand, educational systems have had to evolve and adapt. One such approach is mathematical modelling. Mathematical modelling is an area of mathematics that uses real-world problems as its starting point and employs mathematical tools and principles to solve them. It's also increasingly being used as a tool for competency-based mathematics education, allowing students to develop their problem-solving skills through real-world applications (Hidyat et al., 2021).

What is Competency-Based Education?

Competency-based education (CBE) is an educational approach that prioritizes acquiring knowledge and skills necessary to perform a specific task or job over traditional methods that focus on the amount of time spent in the classroom. In a competency-based education system, learning is focused on mastering specific competencies or skills rather than completing a set number of courses or accumulating a specific number of credit hours. This approach emphasizes the mastery of knowledge and skills by students, and learning is personalized and flexible to fit individual needs and learning styles. CBE is typically student-cantered and allows learners to advance at their own pace, providing them with the opportunity to demonstrate their mastery of competency when they are ready.

In a competency-based education system, students are assessed on their ability to demonstrate specific competencies, skills, or knowledge rather than receiving a grade for a class or assignment. CBE aims to better prepare learners for the workforce by equipping them with the skills and knowledge necessary to excel in their chosen profession and by focusing on the practical application of learning.

The constructivist concept, 21st-century skills instruction, and flexible learning models are incorporated into competency-based education (CBE), a method of instruction that focuses on the individual learner. The pace, structure, and goals of CBE teaching methods differ from those of conventional teaching methods. The end goal is not for students to "cover the content," pass a test or prepare for college or a specific career, but rather master skill sets that will allow students to pursue their goals successfully, no matter what they choose to do in life (McGehee, 2021).

Competent-based education can be used to measure student progress and provide feedback to students in a timely manner. This can help to improve student engagement and motivation as well as promote a sense of ownership among students (Krawec, 2014). Finally, competency-based learning can also

help to reduce the amount of time teachers spend on grading and other administrative tasks, freeing up more time for instruction. For example, because students can demonstrate their mastery of the material rather than just completing a set of assignments, teachers can use this data to identify students who need more help or who could use additional challenges. This data can also be used to inform curriculum decisions and identify areas where students may need extra support. If the data reveals that students struggle with a certain unit or subject, teachers can adjust their teaching methods or create additional resources to help students better understand the material.

Additionally, if the data shows that a certain group of students is falling behind, educators can design targeted interventions to provide additional support. This data can also help inform policy decisions related to educational programming, funding, and resources. For example, if a particular group of students is consistently falling behind, school administrators might decide to reallocate funds to increase the number of teachers and counselors dedicated to that group of students. This data can also be used to identify areas of student success, which can inform teaching strategies and curriculum design. For example, if the data reveals that students have higher success rates in a certain subject, educators can use this information to create a more challenging curriculum or focus more attention on that particular subject. Additionally, the data can be used to identify areas where students may be struggling, which can help educators develop targeted interventions to help those students improve their performance.

How is Mathematics Different in a CBE Environment?

Traditionally,mathematics teaching has relied on rote learning and repeated practice without much focus on understanding the reasoning behind mathematical concepts or exploring alternative learning methods. This traditional approach may help students develop strong calculation abilities, but it often results in weaker skills in problem-solving and conceptual comprehension of mathematics. The CBE

mathematics courses concentrate on mathematical literacy, which is defined as "a person's ability to apply their mathematical knowledge to practical situations." It takes more than simply knowing a mathematical procedure to be highly mathematically literate (McGehee, 2021). For example, we wouldn't necessarily classify a person as literate if we read a book to them repeatedly and they finally learned the words by heart.

Competency-Based Education (CBE) is a student-centered approach to learning that focuses on mastering specific skills and knowledge rather than simply completing courses or meeting seat-time requirements. In a CBE environment, mathematics education is different in several ways:

- Emphasis on Demonstrated Mastery: In a traditional classroom setting, students move through a curriculum at a predetermined pace, regardless of their individual skill levels. In a CBE environment, however, students are given the opportunity to work at their pace and demonstrate mastery of specific mathematics competencies before moving on to the next level. This allows students to focus on the areas where they need the most help and move quickly through the areas where they are already proficient.
- Personalized Learning: In a CBE environment, mathematics education is personalized to meet the needs of each individual student. Teachers and mentors work closely with students to identify their strengths and weaknesses and develop a customized learning plan that is tailored to their needs. This allows students to receive targeted instruction and support, which can help them master mathematics skills more quickly and effectively.
- *Flexible Learning Pathways:* In a traditional classroom setting, students are often limited to a single pathway through the mathematics curriculum. In a CBE environment, however, students are given the flexibility to choose their own learning pathways based

- on their individual interests and goals. This allows students to explore different areas of mathematics and develop a deeper understanding of the subject matter.
- Authentic Assessment: In a CBE environment, assessment is focused on demonstrating mastery of specific mathematics competencies rather than simply completing assignments or exams. Students are given the opportunity to demonstrate their knowledge and skills through a variety of authentic assessments, such as projects, portfolios, and real-world simulations. This allows students to apply their mathematics skills in meaningful ways and develop a deeper understanding of the subject matter.
- Integration of Technology: In a CBE environment, technology is often used to enhance mathematics education. Students may use online learning resources, interactive mathematics games, and educational software to reinforce mathematics concepts and practice mathematics skills. This allows students to receive immediate feedback on their progress and track their own learning. Additionally, teachers and mentors can use technology to monitor student progress and provide targeted support and feedback.

How can Mathematical Modelling be a Tool for Competency-Based Mathematics Learning?

Mathematical modelling can be a powerful tool for competency-based mathematics education, as it allows students to use their mathematical knowledge and understanding to solve real-world problems. This type of problem-solving can help students see the relevance of mathematics and how it can be applied to their own lives. Moreover, the application of mathematical modelling in education provides students with a unique opportunity to acquire essential skills, such as critical thinking, problem-solving, and decision-making. These skills are valuable not only in their future careers but also in their daily lives, where they can make informed decisions and solve

real-world problems effectively. By engaging in mathematical modelling, students can hone their analytical skills and develop a structured approach to problem-solving, equipping them with the tools necessary to navigate complex challenges and situations with ease. Ultimately, the integration of mathematical modelling in education serves as an essential building block for students to cultivate valuable skills that will undoubtedly prove invaluable throughout their lives. By providing students with an opportunity to practice applying mathematics to realworld problems, mathematical modelling helps students to become more competent in mathematics Competency-based education (Shahbari & Tabach, 2020). Furthermore, it encourages students to become more creative and self-reliant in their approach to mathematics, as they can come up with their own solutions to problems. Ultimately, mathematical modelling helps students to gain a better understanding of the subject and to become more confident in their mathematical ability. By providing a visual representation of the mathematical concepts, the student is better able to understand how the mathematical ideas work in practice.

In addition, the use of mathematical models can help to provide a more accurate prediction of real-world scenarios, enabling students to understand the implications of their decisions and to make better-informed decisions (NCERT, 2005). Mathematical models can also help to identify patterns in data and to identify relationships between different variables. This can help students to develop an understanding of the underlying causes of certain behaviors and can help them to identify potential solutions to problems. Finally, mathematical models can also help to simulate and predict the outcomes of different scenarios and to identify areas of risk and opportunity. For example, a model could be used to analyse the potential impact of new technologies on a market or to predict how a certain policy might affect the economy over a certain period of time. By using mathematical models, it is possible to assess the potential risks and rewards of different scenarios and make informed decisions.

Strategies for Incorporating Mathematical Modelling into Competency-Based Mathematics Education

There are several strategies that teachers can use to incorporate mathematical modelling into their CBME classrooms:

- Use hands-on activities: Hands-on activities are a great
 way to engage students in mathematical modelling.
 These activities can involve tasks such as constructing
 models out of everyday objects, using manipulatives
 to represent mathematical equations or using computer
 simulations to explore mathematical concepts.
- *Encourage collaboration:* Working in small groups or pairs can be an excellent way for students to engage in mathematical modelling. This gives them the opportunity to discuss and share ideas, as well as to learn from each other.
- Facilitate student-led investigations: Allowing students to lead their own investigations can be a great way to engage them in mathematical modelling. This can involve tasks such as researching a mathematical topic, developing a model to answer a specific question, or designing a project to explore a mathematical concept.
- Use real-world examples: Examples from the real
 world can be a great way to motivate students and help
 them understand the relevance and importance of
 mathematical modelling. Examples could include tasks
 such as building a model of a bridge to explore the
 mathematics of structural engineering or using
 population data to explore the mathematics of
 demographics.

Pedagogical Concerns of Mathematical Modelling

There are many advantages of using mathematical modelling in CBME, including:

 Increased student engagement: Using mathematical modelling can help to make mathematics more interesting and engaging for students. Working on realworld problems can help to bring the subject to life and make it more meaningful for students.

- *Improved problem-solving skills:* By working on projects and tasks that involve mathematical modelling, students can develop their problem-solving skills. They learn to think critically and creatively about how to solve a problem, and they get practice in applying their mathematics knowledge to real-world situations.
- Improved understanding of core concepts: By modelling real-world problems, students can gain a deeper understanding of the underlying mathematics concepts. They learn how to use the mathematics they know to solve a problem, as well as how to apply their knowledge to different scenarios.
- Improved communication skills: Working on projects involving mathematical modelling can also help students to develop their communication skills. They learn how to explain their solutions to others, as well as how to collaborate and work as part of a team.
- STEM Competency: Mathematical modelling is an essential tool for developing STEM competency. Through mathematical modelling, students can discover and understand the underlying principles of the science, technology, engineering, and mathematics that are involved in a particular problem. They can then use this knowledge to develop better solutions. Mathematical modelling promotes hands-on learning activities that provide students with an opportunity to experience the principles of STEM in a real-world setting. This type of learning helps students understand how STEM principles are applied in everyday life.

Conclusion

Mathematical modelling is a powerful tool for problemsolving. It can be used to enhance competency-based mathematics education, which helps students in developing the skills they need to succeed in mathematics. By using this approach, teachers can engage their students and provide them with an environment where they can think critically and apply their knowledge of mathematics in real-life contexts. This helps to create an effective learning experience that allows for better understanding and retention of mathematical concepts. With careful planning and implementation, mathematical modelling can be a great addition to any mathematics curriculum. Therefore, it can be a powerful tool that can be used to promote competency-based mathematics education. When used effectively, mathematical modelling can help students to develop the necessary skills and knowledge to become competent mathematicians. By incorporating mathematical modelling into the classroom, teachers can also help students to develop their problem-solving skills, gain a better understanding of mathematics concepts, and improve their communication skills.

REFERENCES

- Abassian, A., Safi, F., Bush, S., & Bostic, J. (2020). Five different perspectives on mathematical modeling in mathematics education. *Investigations in Mathematics Learning*, 12(1), 53-65. https://doi.org/10.1080/19477503.2019.1595360
- Albarracín, L. (2020). Large number estimation as a vehicle to promote mathematical modeling. *Early Childhood Education Journal*, 1(1), 1-11. https://doi.org/10.1007/s10643-020-01104-x
- Arseven, A. (2015). Mathematical Modelling Approach in Mathematics Education. *Universal Journal of Educational Research*, 3(12), 973-980. http://dx.doi.org/10.13189/ujer.2015.031204
- Blum, W. & Leiß, D. (2006). Filling up the problem of independencepreserving teacher interventions in lessons with demanding modelling tasks. In M. Bosch (Ed.), *Proceedings of the Fourth Congress of the European Society for Research in Mathematics Education* (CERME 4). Barcelona, Spain: Universitat Ramon Llull Editions, pp. 1623–1633. http://www.erme.tu-

- dortmund.de/~erme/CERME4/CERME4_WG13. pdf#page=13
- Giberti, C., & Maffia, A. (2020). Mathematics educators are speaking about PISA, aren't they? *Teaching Mathematics and its Applications: An International Journal of the IMA*, 39(4), 266-280. https://doi.org/10.1093/teamat/hrz018
- Hidayat, R., Adnan, M., & Abdullah, M. F. N. L. (2022). A systematic literature review of measurement of mathematical modeling in mathematics education context. *Eurasia Journal of Mathematics, Science and Technology Education, 18*(5), em2108. https://doi.org/10.29333/ejmste/12007
- Hidayat, R., Qudratuddarsi, H., Mazlan, N. H., & Zeki, M. Z. M. (2021). Evaluation of a test measuring mathematical modelling competency for Indonesian college students. *Journal of Nusantara Studies (JONUS)*, 6(2), 133-155. http://dx.doi.org/10.24200/jonus.vol6iss2pp133-155
- Kaiser, G. & Sriraman, B. (2006). A global survey of international perspectives on modelling in mathematics education. *Zentral Didak Math (ZDM)*, 38, 302–310. https://link.springer.com/content/pdf/10.1007/BF02652813.pdf
- Krawec, J. L. (2014). Problem representation and mathematical problem solving of students of varying math ability. *Journal of Learning Disabilities*, 47(2), 103–115. https://scholarship.miami.edu/discovery/fulldisplay/alma991031447792302976/01UOML_INST:ResearchR
- Lesh, R. & Doerr, H. M. (eds.) (2003). Beyond Constructivism: Models and Modeling Perspectives on Mathematics Problem Solving. *Learning, and Teaching*. Mahwah, NJ: Erlbaum. https://emis.dsd.sztaki.hu/journals/ZDM/zdm036r3.pdf
- McGehee, N. (2021). Competency-Based Education in Mathematics. Michigan Virtual. RetrievedDecember 20, 2022 fromhttps://michiganvirtual.org/blog/competency-based-education-in-mathematics/.
- Ministry of Education. (2020). *National education policy* 2020. Government of India. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- NCERT, (2006). *Position Paper, National Focus Group on Teaching of Mathematics*. NCERT, New Delhi. https://ncert.nic.in/pdf/focus-group/gender_issues_in_education.pdf

- NCERT. (2005). *National curriculum framework 2005*. Government of India. https://ncert.nic.in/pdf/nc-framework/nf2005-english.pdf
- Niss, M., Blum, W. & Galbraith, P. (2007). *Modelling and Applications in Mathematics Education*. The 14th ICMI Study (W. Blum, P. Galbraith, H.-W. Henn & M. Niss eds). New York, NY: Springer Science + Business Media, LLC, 3–32.
- Nuryadi, A. (2021). Solution plan as a strategy to support students in modeling mathematics. *Journal of Physics: Conference Series*, 1806, 1-7.http://doi.org/0.1088/1742-6596/1806/1/012117
- OECD. (2013). PISA 2012 results: What students know and can do (Volume I): Student performance in mathematics, reading and science. Paris, France: OECD Publishing. https://www.oecd-ilibrary.org/education/pisa-2012-results-what-students-know-and-can-do-volume-i_9789264201118-en
- Riyanto, B., Putri, R. I. I., & Darmawijoyo. (2017). Mathematical modeling in realistic mathematics education. *Journal of Physics: Conference Series*, 943(1), 1-7. http://dx.doi.org/10.1088/1742-6596/943/1/012049
- Shahbari, J. A., & Tabach, M. (2020). Features of modeling processes that elicit mathematical models represented at different semiotic registers. *Educational Studies in Mathematics*, 105(2), 115-135. https://doi.org/10.1007/s10649-020-09971-2
- Stacey, K. (2015). The real world and the mathematical world. In *Assessing mathematical literacy*, 57-84. Springer, Cham. https://doi.org/10.1007/978-3-319-10121-7_3

उच्च शिक्षा में जीवन कौशल शिक्षा की प्रासंगिकताः राष्ट्रीय शिक्षा नीति 2020 के संदर्भ में

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सारांश

राष्ट्रीय शिक्षा नीति 2020 भारतीय मूल्यों एवं दायित्वों से युक्त ऐसी शिक्षा नीति है, जो इस बदलते विश्व में नागरिकों की भूमिका और उत्तरदायित्वों के प्रति जागरूक बनाने पर बल देती है। इस नीति के मूल में विद्यार्थियों में भारतीय होने का गर्वन केवल उनके विचार में, अपितु व्यवहार, बुद्धि एवं कार्यों के साथ—साथ उनके ज्ञान, कौशल, मूल्यों व सोच में भी होना चाहिए। जो स्थायी विकास, मानवाधिकारों और वैश्विक कल्याण के प्रतिबद्ध हो. जिससे सही मायने में वे विश्व के जिम्मेदार नागरिक बन

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सकें। राष्ट्रीय शिक्षा नीति 2020 का उद्देश्य एक बेहतर व्यक्ति का विकास करना है- जो तर्क संगत विचार और कार्य करने में सक्षम हो, जिसमें करुणा और सहानुभूति, साहस और लचीलापन, वैज्ञानिक चिंतन, रचनात्मक कल्पना शक्ति और नैतिक मूल्य हो। नीति का उद्देश्य ऐसे उत्पादक लोगों को तैयार करना है जो भारतीय संविधान द्वारा परिकल्पित समावेशी और बहुलतावादी समाज के निर्माण में बेहतर तरीके से योगदान करें। राष्ट्रीय शिक्षा नीति 20 20 अपने उद्देश्यों को प्राप्त करने में जीवन कौशलय था: प्रभावी सम्प्रेषण, समूह कार्य, निर्णय लेने की क्षमता, रचनात्मक चिंतन, समस्या समाधान के कौशलों के महत्त्व को रेखांकित करती है। यूनिसेफ द्वारा वर्ष 2019 में जारी एक प्रतिवेदन में यह कहा गया है कि वर्ष 2030 में दक्षिण एशिया के आधे से अधिक युवाओं के पास न तो ऐसी शिक्षा होगी नहीं ऐसा कौशल जिससे वे रोजगार प्राप्त कर सकें। यह आकलन भारत के संबंध में भी गंभीर वास्तविकता को उजागर करता है। जीवन कौशल शिक्षा व्यक्तियों को स्वस्थ एवं उत्पादक जीवन जीने के लिए सीखने. निर्णय लेने एवं जीवन की वास्तविक समस्याओं का समाधान करने योग्य बनाती है। जीवन कौशल युवा लोगों के समग्र कल्याण और क्षमता को बढावा देने में मदद करती हैं। यह कौशल युवाओं को ज्ञान, दृष्टिकोण और मृल्यों का वास्तविक अर्थ समझने में भी सक्षम बनाते हैं- अर्थात क्या करना है? कैसे करना है? इसके अवसर प्रदान करते है। उच्च शिक्षा में कुशल जीवन कौशल प्रशिक्षण कार्यक्रम को बढ़ावा देना देश में युवाओं के लिए एक सम्मान होगा। यह युवाओं को उनके जीवन और उनके सपनों का निर्माण करने के लिए एवं उनको सशक्त बनाने का एक उत्तम तरीका होगा। राष्ट्रीय शिक्षा नीति २०२० रनातक और रनातकोत्तर शिक्षार्थियों के बीच तकनीकी कौशल के साथ जीवन कौशल विकसित करने पर जोर देने के अलावा उनको विशेष रूप से शैक्षिक प्रथाओं में बदलाव लाने के लिए देश की जनशक्ति को सक्षम बनाने में महत्त्वपूर्ण भूमिका निभाएगी। उच्च शिक्षा प्रणाली में अधिक अनुकुलनशीलता पर जोर देने की आवश्यकता है, जिससे यह आवश्यक कौशल और प्रशिक्षण प्रदान करना जारी रख सकें। इस प्रकार, उच्च शिक्षा के पास हमारे नागरिकों के कौशल विकास में पर्याप्त सुधार के माध्यम से हमारे समाज के भविष्य को प्रभावित करने का एक

महत्त्वपूर्ण अवसर है। यह शोधपत्र भारत में उच्च शिक्षा में जीवन कौशल शिक्षा की प्रासंगिकता से संबंधित है एवं राष्ट्रीय शिक्षा नीति 2 020 के संबंध में उच्च शिक्षा में जीवन कौशल शिक्षा के महत्त्व के बारे में भी चर्चा करता है, जहां इसे पाठ्यक्रम के माध्यम से प्रदान किया गया है और उच्च शिक्षा में उन्हें एकीकृत करने के लिए विभिन्न सुझाव दिए गए हैं।

मुख्य शब्दः उच्च शिक्षा, जीवन कौशल, जीवन कौशल शिक्षा, राष्ट्रीय शिक्षा नीति 2020, पाठचचर्या एकीकरण

परिचय

शिक्षा पूर्वमान व क्षमता को प्राप्त करने, समाज व राष्ट्र के विकास को बढ़ावा देने केलिए मूलभूत आवश्यकता है। उच्च शिक्षा, शिक्षा का वह उचित माध्यम है जिससे देश की समृद्ध प्रतिभा और संसाधनों का सर्वोत्तम विकास और संवर्द्धन व्यक्ति, समाज, राष्ट्र और विश्व की भलाई के लिए किया जा सकता है। यह राष्ट्र की स्थायी आजीविका और आर्थिक विकास में महत्त्वपूर्ण योगदान देती है। कौशल आधारित शिक्षा के माध्यम से युवाओं को आत्मनिर्भर बनाने में राष्ट्रीय शिक्षा नीति 2020 एक महत्त्वपूर्ण दस्तावेज है। राष्ट्रीय शिक्षा नीति (एनईपी 2020) विद्यार्थियों को शिक्षा, उद्योग एवं व्यवसाय के लिए तैयार व प्रवीण बनाने में महत्त्वपूर्ण भूमिका निभाएगी। रनातक और रनातकोत्तर स्तरों पर आवश्यक तकनीकी और व्यावहारिक कौशल के साथ युवाओं को सशक्त बनाने केलिए उच्च शिक्षा पाठ्यक्रम को फिर से पुनर्गठित, एकीकृत व निर्मित किया जाएगा। गुणवत्तापूर्ण विश्वविद्यालयी या महाविद्यालयी शिक्षा का उद्देश्य अच्छे, संपूर्ण और रचनात्मक नागरिकों का विकास करना होना चाहिए। इसमें व्यक्ति को उसकी रुचि के अनुसार एक या एक से अधिक विशिष्ट क्षेत्रों का अध्ययन करने में सक्षम बनाना है, साथ ही चारित्रिक, नैतिक और संवैधानिक मूल्यों, बौद्धिक उत्सुकता, वैज्ञानिक स्वभाव, रचनात्मकता, सेवा की भावना और 21वीं सदी की क्षमताओं का निर्माण करना चाहिए। विज्ञान, सामाजिक विज्ञान, कला, मानविकी, भाषाओं के साथ-साथतकनीकी और व्यावसायिक सम्बन्धी शिल्प आदि विषयों का भी ज्ञान आवश्यक है। जीवन कौशल शिक्षा एक प्रभावशाली शिक्षा प्रणाली है। जिसे व्यवहार पर प्रभाव डालने के लिए सूचना-आधारित दृष्टिकोणों को व्यवहारिक और पारस्परिक कौशल के साथ जोड़ा जाना चाहिए। जिसे जीवन कौशल के रूप में जाना जाता है। जो व्यक्ति के व्यवहार में सकारात्मक परिवर्तन करने के सहायक होता है। जीवन कौशल का उद्देश्य विद्यार्थियों में ज्ञान, दृष्टिकोण और मनोसामाजिक दक्षताओं को विकसित करना है। जो शिक्षार्थियों को स्वस्थ व्यवहार करने, वातावरण और जीवन के गूणों को विकसित करने और उनको बनाए रखने के लिए सकारात्मक क्षमता प्रदान करती है। (बोटविन और ग्रिफिन,2004) जीवन कौशल शिक्षा को (LSE) अटेंशन डेफिसिट हाइपर एक्टिविटी डिसऑर्डर, असामाजिक व्यवहार और नशीली दवाओं के दुरुपयोग के व्यवहार के साथ-साथ एचआईवी की रोकथाम में मदद करने में प्रभावी बताया गया है। इसे अधिकांश देशों के स्कूली शिक्षा पाठचक्रम में व्यापक रूप से सम्मिलित किया गया है।(मोश की, हसनज़ादे और तैमूरी, 2014; और यंका और एगल्टन, 2008) जीवन कौशल शिक्षा का लक्ष्य व्यक्तियों को उन कौशलों से लैस करना है, जो उनको पूर्ण और सफल जीवन जीने के लिए आवश्यक है। जीवन कौशल शिक्षा ज्ञान, दृष्टिकोण और मनोसामाजिक दक्षताओं को विकसित करती है। जो शिक्षार्थियों को स्वस्थ व्यवहार करने, वातावरणीय और जीवन जीने के गुणों को विकसित करने और उनको बनाए रखने के लिए सकारात्मक क्षमता प्रदान करती है। जिनकी उन्हें पूर्ण और सफल जीवन जीने के लिए आवश्यकता है। इसे 'जीवन कौशल' के रूप में जाना जाता है, जो व्यवहार में बदलाव को बेहतर एवं प्रभावी बनाने में सहायक होते है। जीवन कौशल शिक्षार्थियों को उत्तम तरीके से स्वयं को जानने और भली भांति समझने में मदद करते हैं. जिससे जीवन में अधिक सचेत रहने के साथ ही व्यक्तिगत संतुष्टि, प्रकृति और अकादिमक रूप से अपने लक्ष्यों को प्राप्त कर सके। विद्यार्थियों को शिक्षा प्रशिक्षण को आत्मसात करने, जीवन की चुनौतियों का सामना करने के लिए जीवन कौशल शिक्षा का शिक्षा प्रणाली के साथ ही साथ चलाने की आवश्यकता है। एनईपी 2020 उच्च शिक्षा में जीवन कौशल शिक्षा के महत्त्व को पहचानती है, और इस शिक्षा को व्यापक पाठचक्रम में एकीकृत करने का प्रयास कर रही है। इस दृष्टिकोण से यह आशा की जाती है कि विद्यार्थियों को आधुनिक कार्यों में सफल होने और जीवन को पूरा करने के लिए आवश्यक कौशल विकसित करने में मदद मिलेगी। इस प्रकार, विद्यालयों और विश्वविद्यालयों में युवाओं के कौशल विकास को बढ़ाना समय की आवश्यक मांग बन गयी है। आज के समय में, विशेष रूप से भारत में, उच्च शिक्षा का भविष्य और प्रासंगिक कौशल विकास घनिष्ठ रूप से सहसंबंधित है। उच्च शिक्षा इसे स्वीकार एवं तदनुसार कार्य करती है, जो देश के विकास के लिए महत्त्वपूर्ण है। कौशल विकास एक अतिरिक्त पाठ्यक्रम नहीं है, इसे विश्वविद्यालय के पाठ्यक्रम में जोड़ा जा सकता है, और युवाओं के प्रशिक्षण और शिक्षा में एकीकृत किया जा सकता है, जिससेव भारत में किसी उद्योग, नौकरी या व्यवसाय के संचालन को चलाने केलिए आसानी से रोजगार योग्य और सक्षम हो जाएं। आज प्रत्येक क्षेत्र में नौकरी की तलाश कर रहे युवाओं से सफल जीवन और व्यावहारिक कौशल की आशा की जाती है, जिसके बारे में उसे तब तक कोई जानकारी नहीं होती है, जब तक कि वह एक साक्षात्कार का सामना नहीं करता है। उच्च शिक्षा दुनिया में अपनी पहचान बनाने के इच्छुक युवाओं की कौशल आवश्यकताको पूरा करने के लिए पर्याप्त नहीं है। जीवन कौशल विद्यालय या महाविद्यालय और उसके बाद के जीवन में विद्यार्थियों की सफलता में महत्त्वपूर्ण भूमिका निभाते हैं। शिक्षक कभी-कभी इन कोशलों को "सीखने के लिए सीखना" कोशल के रूप में वर्णित करते हैं. जिसे नियमित गतिविधियों के माध्यम से विकसित किया जा सकता है। भारत एक ज्ञानी समाज और शक्तिशाली अर्थव्यवस्था बनने की ओर बढ रहा है साथ ही चौथी औद्योगिक क्रांति की आवश्यकताओं को ध्यान में रखते हुए, रचनात्मक, बहु-विषयक और अत्यधिक कुशल कार्यों के लिए रोजगार के अवसरों के बढ़ते अनुपात की विशेषताओं के अनुसार उच्च शिक्षा प्रणाली को जल्द से जल्द परिवर्तित होना चाहिए। इन आवश्यकताओं की पूर्ती के लिए उच्च शिक्षा को पुनः समायोजित, पुनः संशोधित और पुनः सक्रिय होना चाहिए।

जीवन कौशल क्या हैं?

मनुष्य अपार संभावनाओं से भरा है। जो अनुकरणीय कार्य करने की हमारी क्षमता में प्रकट होता है; उदाहरण के लिए, अभूत पूर्व वैज्ञानिक समझ, सराहनीय सामाजिक सेवाएं, जीवन के विभिन्न क्षेत्रों में उत्कृष्ट उपलिख्यां आदि। मनोवैज्ञानिक मानते हैं कि, हम सभी उत्कृष्टता व प्रवीणता को प्राप्त करने की क्षमता से संपन्न हैं। जीवन कौशल हमारी क्षमता के अहसास और उसके उपयोग में सहायक होते हैं। कभी—कभी, सभीक्षमताओं, लक्ष्यों और दृढ़संकल्पों के साथ भी जीवन में आने वाली बाधाओं के कारण अपने सपनों को साकार करने में असफल हो जाते हैं। वास्तव में, जीवन— कौशल न केवल हमारी क्षमताओं को साकार करने में मदद करते हैं बिल्क, जीवन को एक संघर्षपूर्ण और सार्थक तरीके से जीने में भी मदद करते हैं। सीखने या ज्ञान के माध्यम से प्राप्त आरंभिक कौशल का वर्णन करने के लिए जीवन कौशल का उपयोग किया जाता है। जिसे जीवन कौशल कहा जा सकता है। जीवन कौशल में भावनाएं, धन सम्बन्धी कौशल, विद्यालयी प्रदर्शन, स्वास्थ्य इत्यादि की क्षमताएं भी सम्मिलित हो सकती है। यदि बच्चों में जीवन कौशल का अभ्यास कराया जाता हैं, तो इससे बच्चे के सम्मान, सामाजिक क्षमता और आत्मविश्वास में सुधार हो सकता है।

शब्द 'लाइफिस्किल्स' उन कौशलों को संदर्भित करता है, जिसमें आपको जीवन से अधिकतम लाभ उठाने की आवश्यकता होती है। ये कौशल बहुधा जीवन की बेहतर गुणवत्ता के प्रबंधन और जीवन जीने से जुड़े होते हैं। वे हमारी महत्त्वाकांक्षाओं को पूरा करने और अपनी पूरी क्षमता तक जीवन जीने में हमारी सहायता करते हैं। कोई भी कौशल जो आप के जीवन में उपयोगी हो उसे जीवन कौशल माना जा सकता है।

विश्व स्वास्थ्य संगठन (WHO) ने 1993 में जीवन कौशल को "अनुकूली और सकारात्मक व्यवहार की क्षमता के रूप में परिभाषित किया, जो व्यक्तियों को दैनिक जीवन की मांगों और चुनौतियों से प्रभावी ढ़ंग से निपटने में सक्षम बनाता है।

यूनिसेफ जीवन कौशल को परिभाषित करता है— "एक व्यवहार परिवर्तन या व्यवहार विकास दृष्टिकोण जिसे निर्मित किया गया है। जिसमें तीन क्षेत्रों के संतुलन को संबोधित किया गया है: ज्ञान, दृष्टिकोण और कौशल।" इसलिए जीवन कौशल मनो— सामाजिक और पारस्परिक कौशल का एक बड़ा समूह है, जो लोगों को समुचित निर्णय लेने, प्रभावी ढ़ंग से संवाद करने और साथ ही आत्म—प्रबंधन कौशल विकसित करने में मदद

कर सकता है, जो किसी व्यक्ति के स्वस्थ और उत्पादक जीवन जीने में सहायक होता है। जीवन कौशल बच्चों को एक सीखने का वातावरण प्रदान करते हैं।

जीवन कौशल के प्रकार

विश्व स्वास्थ्य संगठन (डब्ल्यू.एच.ओ.) ने जीवन कौशल को तीन प्रमुख व्यापक क्षेत्रों में वर्गीकृत किया है। ये तीन आरंभिक श्रेणियां एक दूसरे के पूरक श्रेणियां हैं:

- 1. संज्ञानात्मक कौशल
- 2. सामाजिक कौशल
- 3. भावनात्मक कौशल
- 1. संज्ञानात्मक कौशल— संज्ञानात्मक कौशल में आत्म—जागरूकता, महत्त्वपूर्ण विचार, रचनात्मक सोच, समस्या समाधान और निर्णय लेना सम्मिलित है। ये कौशल जीवन के सभी क्षेत्रों जैसे व्यक्तिगत संबंधों, व्यावसायिक सम्बन्धी मुद्दों और सामाजिक समस्याओं का उत्तम ढ़ंग से समाधान करने के लिए आवश्यक हैं। यह सही निर्णय लेने और संघर्षों से बचने के लिए किशोरों को जीवन कौशल की आवश्यकता है। किशोरों को अपने स्वयं के व्यवहार, अपने मित्रों और परिवारजनों के व्यवहार का विश्लेषण करने में भी मदद करता है। मूलरूप से, ये कौशल किसी व्यक्ति के संज्ञान से संबंधित होते हैं।
- 2. सामाजिक कौशल— सामाजिक कौशल में सहानुभूति, पारस्परिक कौशल, संचार कौशल जैसे मौखिक और गैर—मौखिक संचार, सिक्रिय श्रवण कौशल और भली—भांति अपनी भावनाओं को व्यक्त करने की क्षमता सिम्मिलित है। सहानुभूति एक महत्त्वपूर्ण कौशल है, जो दूसरों को समझने में मदद करता है। सहयोग, समूह कार्य में सिक्रिय भागीदारी, विरोधी विचारों के प्रति सिहण्णुता और दूसरों के प्रति सम्मान भी सामाजिक कौशल में सिम्मिलित किये जाते है।
- 3. भावनात्मक कौशल—भावनात्मक कौशल में तनाव से मुक्ति, भावनाओं को नियंत्रित करना, आत्म—प्रबंधन और आंतरिक संघर्षों

को हल करना सम्मिलित किये जाते है। किसी व्यक्ति के आत्मविश्वास को बढ़ाने के लिए इनकी आवश्यकता होती है, तािक वह अपने जीवन में अपने बल पर बदलाव ला सके। यह कौशल व्यक्ति को तनाव के कारणों और प्रभाव की पहचान करने में सक्षम बनाते है। जिस के लिए वह बहु आयामी रणनीितयों का विकास और उपयोग करते हैं।

आवश्यक जीवन कौशल की कोई सेट या पूरी सूची नहीं है। 1993 में यूनेस्को द्वारा जैक्सडेलर्स की अध्यक्षता में नियुक्त शिक्षा पर अंतर्राष्ट्रीय आयोग ने सीखने के चार स्तंभों पर ध्यान केंद्रित किया है जो एक व्यक्ति को बेहतर जीवन केलिए आवश्यक है—

- 1. जानने के लिए सीखना (Learning to know)— संज्ञानात्मक क्षमता, निर्णय लेना, विचार करना, समस्या समाधान कौशल, आदि महत्त्वपूर्ण है।
- 2. होने के लिए सीखना (Learning to be)— व्यक्तिगत क्षमताएं, आंतरिक नियंत्रण को बढ़ाने के कौशल, भावनाओं को प्रबंधित करने के लिए कौशल और तनाव के प्रबंधन के लिए कौशल इत्यादि सम्मिलित है।
- 3. करने के लिए सीखना (Learning to do)—यह एक नए प्रकार के कौशल, बौद्धिक से अधिक व्यावहारिक कौशल की मांग करता है। इसमें सामग्री और प्रौद्योगिकी, मानवीय गुणों और पारस्परिक संबंधों के लिए गौण होते जा रहे हैं।
- 4. एक साथ रहने के लिए सीखना (Learning to live together)—पारस्परिक सहसम्बन्धात्मक कौशल, पारस्परिक संचार कौशल, विचार विमर्श कौशल, जवाबदेही कौशल, सहानुभूति, सहयोग एवं समूह कार्य आदि आते है।

यूनिसेफ के अनुसार जीवन कौशल

यूनिसेफ (1997) व्यापक— जीवन कौशल — ढांचा जीवन कौशल के कई स्तरों को मानता है—

 बुनियादी या आरंभिक कौशल, मनोवैज्ञानिक एवं सामाजिक कौशल (सामाजिक एवं सांस्कृतिक मूल्यों पर आधारित)

- 2. स्थिति–विशिष्ट कौशल (जैसे, बातचीत, मुखरता, संघर्ष, समाधान),
- 3. व्यावहारिक जीवन कौशल (उदाहरण के लिए, लिंग भूमिकाओं को समझना, जानना या चुनौती देना, नशा आदि के सेवन से इनकार करना)।?

विश्व स्वास्थ्य संगठन और जीवन कौशल

विश्व स्वास्थ्य संगठन (डब्ल्यूएचओ), जिनेवा द्वारा 1997 के एक लेख का शीर्षक है "स्कूलों में बच्चों और किशोरों के लिए जीवन कौशल शिक्षा" मानसिक स्वास्थ्य पर कार्यक्रम, जिसमें दो भाग हैं,

प्रथम भाग—मनोसामाजिक क्षमता के लिए जीवन कौशल का परिचय और द्वितीय भाग; दिशा निर्देश, जीवन कौशल कार्यक्रमों का विकास और कार्यान्वयन।

प्रथम भाग; इसमें दस प्रकार के मूल (सामान्य) जीवन कौशलों की चर्चा की गई है।

इस प्रकार हैं-

- 1. आत्म—जागरूकता—डब्ल्यूएचओ ने इसे परिभाषित किया है, आत्म—जागरूकता में स्वयं की पहचान, चरित्र, ताकत, कमजोरी, इच्छाएं, पसंद और नापसंद सिमलित हैं।
- 2. सहानुभूति—इसमें एक दूसरे की भावनाओं को समझने की क्षमता सम्मिलित है। जो उन्हें भावनात्मक रूप से समर्थन प्रदान करने में मदद करता है।
- 3. प्रभावी संचार— प्रभावी संचार एक दूसरों के साथ सामाजिक संबंध स्थापित करने और उसे बनाए रखने केलिए प्रभावी मौखिक और गैर—मौखिक संचार की क्षमता है।
- 4. पारस्परिक संबंध—यह एक महत्त्वपूर्ण जीवन कौशल और मानव बुद्धि का सबसे महत्त्वपूर्ण आयाम है। यह अन्य व्यक्तियों के साथ सकारात्मक संबंधों को शुरू करने और बनाए रखने को प्रोत्साहित करता है। जिससे समाज में संतुलन और विकासके बाधक तत्वों को दूर कर के पारस्परिक संबंधों को स्थापित किया जा सके।

- 5. रचनात्मक चिंतन— यह व्यक्ति को संवेदनशील बना कर नवीन विचारों एवं चिंतन को उत्पन्न करता है जिससे उनमें समझ के साथ कार्यों को करने की क्षमता का विकास होता है। इस प्रकार का चिंतन व्यक्ति को प्रतिदिन के अनुभवों के माध्यम से अच्छा सृजन करने की क्षमता प्रदान करता है।
- 6. विवेचनात्मक चिंतन—इसमें व्यक्ति चिंतन, तर्क और कल्पना एवं निर्णय द्वारा असामान्य किन्तु प्रासंगिक विचारों के साथ सामंजस्य स्थापित करने की क्षमता रखते है। यह व्यक्ति की सोच की गुणवत्ता में सुधार करता है, और एक व्यक्ति को तार्किक और निष्पक्ष रूप से जानकारी और अनुभवों का विश्लेषण करने में सक्षम बनाता है।
- 7. निर्णयलेना— यह एक व्यक्ति को सही समय पर सही निर्णय लेने और विभिन्न विकल्पों में से सर्वश्रेष्ठ का चयन करने में मदद करता है। यह विभिन्न विकल्पों के पक्ष और विपक्ष का विश्लेषण और उसके मूल्य को आकने की क्षमता भी प्रदान करता है। जिससे व्यक्ति वास्तविकता का आकलन कर पाता है।
- 8. समस्या समाधान— यह कौशल लक्ष्य को प्राप्त करने एवं उचित मार्ग खोजने का एक प्रयास है। इससे व्यक्ति समस्याओं के कारणों को विश्लेषित करने योग्य बनाता है। तािक वह समस्याओं के कारणों को समझ कर उसका समाधान करने में सक्षम हो सके।
- 9. तदनुभूति— इस कौशल के माध्यम से व्यक्ति अपनी और दूसरों की भावनाओं को जानने में सक्षम होता है। यह कौश लव्यक्ति को उसकी भावनाओं को व्यक्त करने के स्वस्थ, सकारात्मक और सुरक्षित तरीके जानने में सक्षम बनाता है। तदनुभूति हमें अपने से अलग लोगों को समझने एवं उनको स्वीकार करने में सहायता करती है। यह व्यक्ति की भावनाओं के प्रभाव की पहचान कर उनको उचित रूप से प्रतिक्रिया करने साथ अत्यधिक उत्तेजित करने वाली भावनाओं जैसे; क्रोधव दुःख को नियंत्रित करने के तरीके सीखने में भी सहायता करती है।

10. तनाव मुक्ति कौशल—यह कौशल व्यक्ति को तनाव के स्रोत, तनाव के प्रभाव और तनाव को नियंत्रित करने की तकनीक और इसे दूर करने के उपायों की पहचान करने में सक्षम बनाता है।

जीवन कौशल शिक्षा

जीवन कौशल शिक्षा व्यक्तियों के व्यावहारिक कौशल और उनके दैनिक जीवन के विभिन्न पहलूओं जैसे; संचार, समस्या-समाधान, निर्णय लेना, आत्म-देखभाल, समूह कार्य इत्यादि सामाजिक कौशल को प्रभावी ढंग से प्रबंधित करने के लिए आवश्यक दक्षताओं को सिखाने की प्रक्रिया को संदर्भित करता है। जीवन कोशल शिक्षा एक प्रकार की शिक्षा है, जो व्यक्तियों को दैनिक जीवन जीनव के लिए व्यावहारिक और आवश्यक कौशल सिखाने पर केंद्रित है। जीवन कौशल शिक्षा (LSE) एक शब्द है जिसका प्रयोग बहुधा सीखने के अनुभवों का वर्णन करने के लिए किया जाता है। जिस का उद्देश्य ज्ञान, दृष्टिकोण और मनोसामाजिक दक्षताओं को विकसित करना है। जो शिक्षार्थियों को स्वस्थ व्यवहार करने, वातावरण और जीवन के गूणों को विकसित करने और उनको बनाए रखने के लिए सकारात्मक क्षमता प्रदान करती है। (बोटविन और ग्रिफिन,2004) LSE को अटेंशन डेफिसिट हाइपर एक्टिविटी डिसऑर्डर, असामाजिक व्यवहार और नशीली दवाओं के दुरुपयोग के व्यवहार के साथ-साथ एचआईवी की रोकथाम में मदद करने में प्रभावी बताया गया है। इसे अधिकांश देशों के स्कूली शिक्षा पाठ्यक्रम में व्यापक रूप से समाहित किया गया है (मोशकी, हसनजादे, और तैमूरी, 2014; और यंका और एगलटन, 2008)। जीवन कौशल शिक्षा का लक्ष्य व्यक्तियों को उन कौशलों से लैस करना है, जिनकी उन्हें पूर्ण और सफल जीवन जीने के लिए आवश्यकता है।

उच्च शिक्षा में जीवन कौशल शिक्षा का महत्त्व

जीवन कौशल शिक्षा महत्त्वपूर्ण है क्योंकि, यहव्यक्तियों को व्यावहारिक और आवश्यक कौशल विकसित करने में मदद करती है, उन्हें दैनिक जीवन, परिवार, समाज, और कार्यस्थल के प्रति अच्छा आचरण करने की आवश्यकता होती है। भारत की उच्चिशिक्षा में जीवन कौशल का महत्त्व अन्य देशों के समान ही है। भारत के संदर्भ में, कुछ विशिष्ट कारण हैं जो जीवन कौशल शिक्षा को महत्त्वपूर्ण बनाते है। अतः उच्च शिक्षा में जीवन कौशल कई कारणों से महत्त्वपूर्ण है—

- समस्या सुलझाने और निर्णय लेने की क्षमता— यह कौशल एक व्यक्ति को व्यक्तिगत और व्यावसायिक चुनौतियों का सामना करने में सक्षम बनाकर एवं उसका प्रबंधन करने में महत्त्वपूर्ण योगदान देते हैं।
- 2. संचार और पारस्परिक कौशल— इस कौशल के माध्यम से व्यक्ति आपस में स्वस्थ संबंध बनाने और आगे बनाए रखने के लिए सक्षम होते हैं।
- 3. आलोचनात्मक सोच और रचनात्मकता—यह कौशल समस्याओं को हल करने और नवीन समाधानों के लिए मूल्यवान हैं।
- 4. वित्तीय साक्षरता और बजट कौशल— यह व्यक्तिगत वित्त के प्रबंधन और उपयुक्त वित्तीय निर्णय लेने के लिए आवश्यक हैं।
- 5. समय प्रबंधन और स्व-देखभाल कौशल- यह कौशल जीवन में संतुलन बनाए रखने और तनाव से बचने के लिए महत्त्वपूर्ण है।
- 6. व्यवसाय की तैयारी—जीवन कौशल जैसे समस्या समाधान, रचनात्मक सोच और प्रभावी संचार अत्यधिक महत्त्वपूर्ण कौशल है जो विद्यार्थियों को शिक्षा, नौकरी एवं व्यवसाय में सफलता प्रदान करते हैं।
- 7. अनुकूलता—जीवन कौशल छात्रों को कक्षा के अंदर और बाहर बदलती परिस्थितियों और आने वाली चुनौतियों के अनुकूल कार्य करने में मदद करते हैं।
- 8. व्यक्तिगत विकास—जीवन कौशल शिक्षा छात्रों में आत्म—जागरूकता और भावनात्मक बुद्धिमत्ता की भावना विकसित करने में सहायता कर सकती है, जो व्यक्तिगत विकास और कल्याण के लिए महत्त्वपूर्ण है।
- 9. प्रभावी शिक्षण— समय प्रबंधन, संगठन और तनाव प्रबंधन जैसे जीवन कौशल छात्रों को अधिक प्रभावी शिक्षार्थी बनने में मदद

कर सकते हैं, जिससे वे अपने पाठ्यक्रम के भार का प्रबंधन कर सके और अकादिमक रूप से सफल हो सके।

- 10. पारस्पिक संबंध— संघर्ष, समाधान और समूह कार्य जैसे जीवन कौशल छात्रों को उच्च शिक्षा समुदाय में सहपाठियों, प्रशिक्षकों और अन्य लोगों के साथ सकारात्मक संबंध बनाने और आगे बनाए रखने में सहायता कर सकते हैं।
- 11. रोजगार क्षमता में सुधार— नौकरी में बढ़ती हुई प्रतिस्पर्धा को देखते हुए, जीवन कौशल छात्रों की सहभागिता को बढ़ावा दे सकते है। और उन्हें अधिक रोजगारपरक बनने में मदद कर सकते है।
- 12. उद्यमशीलता को बढ़ावा देना—महत्त्वपूर्ण एवं रचनात्मक सोच, समस्या समाधान और निर्णय लेने जैसे जीवन कौशल छात्रों को सफल उद्यमी बनने में सहायता कर सकते हैं।
- 13. मानसिक स्वास्थ्य संबंधी चिंताओं को दूर करना—तनाव प्रबंधन और स्वयं की देखभाल जैसे जीवन कौशल भारत में तेजी से महत्त्वपूर्ण होते जा रहे हैं, क्योंकि आज देश बढ़ते मानसिक स्वास्थ्य संकट से जूझ रहा है।
- 14. कौशल अंतराल को पाटना—जीवन कौशल शिक्षा छात्रों के कौशलों के अंतर को दूर करने और उन्हें आधुनिक कार्य क्षेत्रों की मांगों के अनुरूप तैयार करने में मदद कर सकती है।
- 15. व्यावहारिक कौशल का विकास— जीवन कौशल शिक्षा छात्रों को संचार, समूह कार्य और नेतृत्व जैसे महत्त्वपूर्ण व्यावहारिक कौशल विकसित करने में मदद कर सकती है, जो विद्यार्थियों के लिए अत्यधिक मूल्यवान हैं।

संक्षेपमें, जीवन कौशल शिक्षा भारत में विद्यार्थियों के व्यक्तिगत और व्यावसायिक विकास का समर्थन करने और उन्हें भविष्य में सफलता के लिए तैयार करने में महत्त्वपूर्ण भूमिका निभा सकती है। जिससे उच्च शिक्षा में विद्यार्थियों का समग्र विकास किया जा सकता है।

एनईपी 2020 के संदर्भ में उच्च शिक्षा में जीवन कौशल शिक्षा

भारत में नई शिक्षा नीति (एनईपी) 2020 उच्च शिक्षा में जीवन कौशल के महत्त्व पर जोर देती है। नीति यह मानती है कि, जीवन कौशल व्यक्तिगत और व्यावसायिक सफलता के लिए महत्त्वपूर्ण हैं और जीवन कौशल शिक्षा को उच्च शिक्षा पाठ्यक्रम में एकीकृत करने का प्रयास भी करती है। एक गुणवत्तापूर्ण उच्च शिक्षा को विद्यार्थियों की उपलब्धि, ज्ञान, रचनात्मक, सार्वजिनक जुड़ा व और समाज में उनके योगदान को बढ़ाने में सक्षम होना चाहिए और विद्यार्थियों को सार्थक व संतोषजनक जीवन जीने एवं परिस्थितियों के अनुरूप कार्य भूमिकाओं के लिए तैयार करना चाहिए। गुणवत्तापूर्ण शिक्षा विश्वविद्यालयी और महाविद्यालयी शिक्षा का अवसर व लक्ष्य होना चाहिए, जिसमे सभी विद्यार्थियों की उच्च शिक्षा तक पहुंच होनी चाहिए। उच्च शिक्षा में जीवन कौशल शिक्षा के संबंध में एनईपी 2020 में प्रमुख प्रावधान दिए गए हैं:

- 1. समग्र शिक्षा की ओर— एनईपी 2020 समग्र शिक्षा के महत्त्व पर जोर देती है और विद्यार्थियों के संज्ञानात्मक, भावनात्मक, शारीरिक और सामाजिक कौशल को विकसित करने का प्रयास करती है।
- 2. स्नातक स्तर की शिक्षा में शैक्षिक दृष्टिकोण का आकलन जो एसटीईएम के साथ मानविकी और कला को एकीकृत करता है, जिसने लगातार सकारात्मक परिणाम दिखाए हैं, इसमें रचनात्मकता औरनवीनता, संज्ञानात्मक सोच और सोचने की उच्चतम क्षमता, समस्याको सुलझाने की क्षमता, समूहकार्य, संचार कौशल आदि सम्मिलित हैं।
- 3. समग्र शिक्षा दृष्टिकोण के माध्यम से अनुसंघान में भी सुधार और वृद्धि हुई है। एक व्यापक समग्र कला शिक्षा मनुष्य की सभी क्षमताओं, जैसे:— बौद्धिक, सौंदर्यपरक, सामाजिक, शारीरिक, भावनात्मक और नैतिकआ दि को एक एकीकृत तरीके से विकसित करने की बात कही गयी है।
- 4. समग्र कला शिक्षा व्यक्तियों को विकसित एवं प्रवीण बनाने में मदद करेगी। जिन विद्यार्थियों के पास कला, मानविकी, भाषा, विज्ञान, सामाजिक विज्ञान और व्यवसायिक तकनीकी और

व्यावसायिक क्षेत्रों में 21 वींसदी की महत्त्वपूर्ण क्षमताएं हैं। उनमें सामाजिक जुड़ाव, व्यावहारिक कौशल, संचार, पारस्परिक संबंध, स्वजागरूकता आदि जीवन कौशलों को विकसित किया जा सकेगा।

- 5. उच्च शिक्षा में अध्यापन रटकर सीखने के बजाय संचार, चर्चा, बहस, अनुसंधान, और अंतः विषय सोच व समझ के अवसरों पर अधिक जोर देने का प्रयास किया जायेगा।
- 6. लचीला और अभिनव पाठ्यक्रम, सामुदायिक जुड़ाव, समाजसेवा, पर्यावरणीय शिक्षा एवं मूल्य— आधारित शिक्षा के क्षेत्रों में क्रेडिट— आधारित पाठ्यक्रम और परियोजनाओं की प्रस्तुति पर जोर दिया जाएगा, जिसमें जीवन कौशल भी सम्मिलत होंगे।
- 7. प्रत्येक उच्च शिक्षा संस्थान में शैक्षिक व्यावसायिक, और व्यक्तिगत परामर्श के साथ—साथ परामर्शदाताओं का प्रावधान होगा जो उच्च शिक्षा प्राप्त करने वाले छात्रों के तनाव, शारीरिक और भावनात्मक कल्याण में सहायता करेगा।
- 8. अगले दशक में व्यावसायिक शिक्षा को चरणबद्ध तरीके से सभी शैक्षणिक संस्थानों में एकीकृत किया जाएगा। कौशल अंतर विश्लेषण और स्थानीय अवसरों की मैपिंग के आधार पर लक्षित क्षेत्रों का चयन किया जाएगा, जिससे तकनीकी और व्यावसायिक शिक्षा समग्र शिक्षा के बड़े दृष्टिकोण का हिस्सा बनजाएगी।
- 9. वैज्ञानिक पद्धित और रचनात्मक सोच पर अधिक जोर देने के साथ खेल और सीखने की खोज— आधारित शैली पर ध्यान देने की बात कही गई है।
- 10. कौशल—आधारित शिक्षा नीति कौशल—आधारित शिक्षा को बढ़ावा देती है और पारंपरिक शैक्षणिक विषयों के साथ—साथ जीवन कौशल शिक्षा को पाठ्यक्रम में एकीकृत करने का प्रयास करती है।
- 11. प्रौढ़ शिक्षा को लागू करने केलिए नवीन उपायों को अपना कर उससे प्राप्त किए जाने वाले परिणामों की सूची में जीवन कौशलों को सूचीबद्ध किया जाएगा।

- 12. वयस्क शिक्षा के लिए पाठ्यक्रम की रूपरेखा में महत्त्वपूर्ण जीवन कौशल (वित्तीय साक्षरता, डिजिटल साक्षरता, व्यावसायिक कौशल, स्वास्थ्य देखभाल और जागरूकता, बाल देखभाल और शिक्षा, और परिवार कल्याण सहित) सम्मिलित किए जाएंगे।
- 13. भारतीय कला और संस्कृति को बढ़ावा देने से सांस्कृतिक जागरूकता और अभिव्यक्ति जैसे कौशल विकसित होंगे। ताकि विद्यार्थियों को पहचान, अपनेपन के साथ—साथ अन्य संस्कृतियों का ज्ञान भी प्राप्त हो सके।
- 14. उच्च शिक्षा पाठ्यक्रम में प्रौद्योगिकी का उपयोग और एकीकरण के साथ तकनीक को भलीभांति समझने वाले शिक्षकों और उद्यमियों (छात्र उद्यमियों सिहत) की रचनात्मकता को बढ़ाने में व शिक्षण की प्रक्रिया में सुधार किया जायेगा।
- 15. व्यवसाय की तैयारी—एनईपी 2020 व्यवसाय की तैयारी के लिए जीवन कौशल के महत्त्व को महत्त्वपूर्ण मानती है और विद्यार्थियों को उन कौशलों से सम्बंधित करने का प्रयास करती है, जिनकी आवश्यकता उन्हें उनके कार्य में सफल होने के लिए होती है।
- 16. रोजगार कौशल— नीति संचार, समूह कार्य और समस्या समाधान जैसे रोजगार परक कौशल विकसित करने के महत्त्व पर प्रकाश डालती है, और इन कौशलों को उच्च शिक्षा पाठचक्रम में एकीकृत करने का प्रयास करती है।

एनईपी—2020 उच्च शिक्षा में जीवन कौशल शिक्षा को महत्त्व प्रदान करती है और इस शिक्षा को व्यापक पाठ्यक्रम में एकीकृत करने का प्रया सभी किया जा रहा है। इस दृष्टिकोण से आशा की जाती है कि, विद्यार्थियों को आधुनिक कार्यों में सफल होने और जीवन को सकारात्मक ढंग से जीने केलिए जिन कौशलों की आवश्यकता है, उनको विकसित करने में मदद मिलेगी।

भारत में उच्च शिक्षा में जीवन कौशल शिक्षा पाठचक्रम

भारत में उच्च शिक्षा में जीवन कौशल शिक्षा पाठचक्रम संस्थान और कार्यक्रम के आधार पर भिन्न-भिन्न होता है। हालांकि, पाठ्यक्रम में बहुधा ऐसे कई विषय और कौशल शामिल होतेहैं, जो विद्यार्थियों के व्यक्तिगत और व्यावसायिक विकास का समर्थन करने के लिए संगठित किए जाते हैं। भारत की उच्च शिक्षा मेंजी वन कौशल शिक्षा पाठचक्रम के कुछ सामान्य तत्वों को सम्मिलित किया गया हैं:

- 1. संचार और पारस्परिक कौशल- इन कौशलों के माध्यम सेविद्यार्थी प्रभावी संचार, संघर्ष समाधान और समूह कार्य के बारे में सीख सकते हैं।
- 2. गहन सोच व समस्या-समाधान कौशल- इन कौशलों के द्वारा विद्यार्थियों में रचनात्मक सोच, निर्णय लेने और समस्या को सुलझाने की रणनीतियों का विकास किया जा सकता है।
- 3. व्यक्तिगत प्रबंधन कौशल— इसके माध्यम से विद्यार्थियों में समय प्रबंधन, आत्म- देखभाल और तनाव प्रबंधन के बारे में जान सकते है।
- **4. वित्तीय साक्षरता कौशल** विद्यार्थी बजट, निवेश और व्यक्तिगत वित्त के प्रबंधन के बारे में समझ सकते है।
- **5. व्यावसायिक चयन में सहायक**—व्यवसाय चयन की योजना, नौकरीकीखोज, रणनीतियां और वृत्तिक सम्बन्ध बनाने के बारे में जान सकते है।

भारत में उच्च शिक्षा में जीवन कौशल शिक्षा के पाठ्यक्रम को विद्यार्थियों के समग्र विकास का समर्थन करने और उन्हें आधुनिक कार्यों में सफलता केलिए तैयार करने केलिए पुनर्गिठत एवं निर्मित किया गया है। जीवन कौशल पाठ्यक्रम को एक पृथक पाठ्यक्रम के रूप में प्रस्तुत किया जा सकता है, या अध्ययन के अन्य पाठचक्रमों और कार्यक्रमों में एकीकृत किया जा सकता है।

उच्च शिक्षा में जीवन कौशल शिक्षा को बढ़ावा देने के लिए सरकारी पहल

भारत सरकार ने उच्च शिक्षा में जीवन कौशल शिक्षा को बढ़ावा देने के उद्देश्य से कई पहल और योजनाएं शुरू की हैं। इस क्षेत्र की कुछ प्रमुख सरकारी योजनाओं में सम्मिलत हैं:

- 1. कौशल भारत— यह भारत सरकार द्वारा शुरू किया गया एक प्रमुख कार्यक्रम है, जिसका उद्देश्य विद्यार्थियों और कार्य में सलंग्न नागरिकों को कौशल—आधारित प्रशिक्षण और शिक्षा प्रदान करना है। इन कार्यक्रम में जीवन कौशल शिक्षा पर एक घटक सम्मिलितहै, जिसका उद्देश्य विद्यार्थियों के व्यावहारिक कौशलों को विकसित करना और उन्हें आधुनिक कार्यों की मांगों के अनुरूप तैयार करना है।
- 2. राष्ट्रीय कौशल विकास निगम (NSDC)—NSDC एक सार्वजनिक—निजी भागीदारी है, जिसका उद्देश्य भारत में कौशल— आधारित शिक्षा और प्रशिक्षण को बढ़ावा देना है। संचार, रचनात्मक सोच और समस्या समाधान सहित कौशलों को विद्यार्थियों के जीवन में विकसित करने के उद्देश्य से कार्यक्रमों और पाठ्यक्रमों की प्रस्तुति करता है।
- 3. स्वच्छ भारत अभियान— यह भारत सरकार द्वारा शुरू किया गया एक राष्ट्र व्यापी अभियान है, जिसका उद्देश्य सार्वजनिक स्थानों पर स्वच्छता और स्वच्छता को बढ़ावा देना है। अभियान में जीवन कौशल शिक्षा पर एक घटक सम्मिलित है, जो विद्यार्थियों के पारस्परिक और संचार कौशल के साथ—साथ उनकी नागरिक होने की जिम्मेदारी की भावना को विकसित करना है।
- 4. राष्ट्रीय सेवा योजना (एनएसएस)— एनएसएस एक स्वैच्छिक सेवा कार्यक्रम है, जिसका उद्देश्य विद्यार्थियों के माध्य सामाजिक और सामुदायिक सेवा को बढ़ावा देना है। कार्यक्रम में जीवन कौशल शिक्षा पर एक घटक सम्मिलित है, जिसका उद्देश्य विद्यार्थियों के नेतृत्व और समूह कार्य कौशल के साथ— साथ एक जिम्मेदार नागरिक होने की भावना विकसित करना है।

भारत में विश्वविद्यालय अनुदान आयोग (यूजीसी) ने जीवन कौशल शिक्षा के महत्त्व को पहचाना है, और उच्चिशक्षा पाठ्यक्रम में जीवन कौशल शिक्षा को बढ़ावा देने और एकीकृत करने के लिए कई कदम उठाए हैं।

जीवन कौशल शिक्षा के संबंध में यूजीसी द्वारा की गई कुछ प्रमुख पहलों में सम्मिलित हैं:

भारत में विश्वविद्यालय अनुदान आयोग (UGC) ने उच्च शिक्षा संस्थानों के लिए एक जीवन कौशल शिक्षा मॉड्यूल विकसित किया है। मॉड्यूल उच्च शिक्षा पाठ्यक्रम में जीवन कौशल शिक्षा को सिम्मिलित करने के लिए दिशा निर्देश और संसाधन प्रदान करता है।

यू०जी०सी० जीवन कौशल शिक्षा मॉड्यूल में निम्नलिखित घटक समाहित हैं:

- 1. जीवन कौशल की परिभाषा और अवधारणा—मॉड्यूल जीवन कौशल की व्यापक परिभाषा और व्यक्तिगत और व्यावसायिक विकास में उनके महत्त्व को दर्शाता है।
- 2. पाठचर्चा की रूप रेखा— मॉड्यूल, उच्च शिक्षा में जीवन कौशल शिक्षा पाठचक्रम को निर्मित और कार्यान्वित करने के लिए एक रूपरेखा प्रदान करता है।
- 3. शिक्षण और सीखने की रणनीतियाँ— मॉड्यूल, कक्षा में जीवन कौशल शिक्षा प्रदान करने के लिए प्रभावी शिक्षण और सीखने की रणनीतियों पर मार्ग दर्शन प्रदान करता है।
- 4. मूल्यांकन और मूल्यांकन—मॉड्यूल, विद्यार्थियों के सीखने और जीवन कौशल शिक्षा में प्रगति के मूल्यांकन और मूल्यांकन के लिए दिशा निर्देश प्रदान करता है।
- 5. संकाय विकास— मॉड्यूल, प्रशिक्षणऔर व्यावसायिक विकास के अवसरों सहित संकाय विकास के लिए संसाधन और सहायता प्रदान करता है।
- 6. अनुसंधान और मूल्यांकन—यू०जी०सी० ने उच्च शिक्षा में जीवन कौशल शिक्षा के प्रभाव को समझने और सर्वोत्तम प्रभावों की पहचान करने के उद्देश्य से अनुसंधान और मूल्यांकन पहलों का समर्थन किया है।

7. छात्र जुड़ाव—यूजीसी ने विश्वविद्यालयों को प्रोत्साहित किया है कि, वे विद्यार्थियों को अतिरिक्त गतिविधियों, इंटर्निशप, और उच्च शिक्षा में अन्य अनुभवात्मक रूप से सीखने के साथ उनको जीवन कौशल के विकास के माध्यम से जीवन कौशल शिक्षा से जुड़ने के अवसर प्रदान करें।

संक्षेपमें, भारत सरकार ने इन सभी योजनाओं को शुरू किया हैं, जैसा कि ऊपर वर्णित है, जिसका उद्देश्य पाठ्यक्रम में जीवन कौशल शिक्षा के विकास और एकीकरण के माध्यम से जीवन कौशल शिक्षा को बढ़ावा देना है। जीवन कौशल शिक्षा विद्यार्थियों को उनके व्यक्तिगत और व्यावसायिक जीवन में अधिक रोजगार परक और सफल बनाने में मदद करेगी

उच्च शिक्षा में जीवन कौशल शिक्षा को लागू करने की चुनौतियाँ

जीवन कौशल शिक्षा को प्रभावित करने वाली चुनौतियों में संसाधनों की कमी, अपर्याप्त शिक्षक, शिक्षार्थी प्रशिक्षण, परिवार के समर्थन की समस्याएं, साक्षरता, जीवन कौशल लक्ष्यों कोपूराकरने की दोहरी जिम्मेदारी और सांस्कृतिक संवेदनशीलता का प्रबंधन आदि सम्मिलित हैं। इनके अलावा, यह समस्या लिंग संबंधी मुद्दों से जटिल है, जिसमें किशोर लड़कियों (लड़कों की तुलना में) में सहभागिता की कमी, सांस्कृतिक बाधाएं और सामाजिक मानदंड सम्मिलित हैं जो छात्राओं की शिक्षा तक पहुंच को सीमित करते हैं, कुछ अन्य चुनौतियाँ इस प्रकार हैं:

- 1. विद्यार्थियों पर अकादिमक बोझ—उच्च शिक्षा के विद्यार्थियों पर अकादिमक विषयों और पाठ्यक्रम की अन्य सह—पाठ्यचर्या संबंधी गतिविधियों का बोझ होता है। जिसके लिए उन्हें मात्र ग्रेड अर्जित करना होता है।
- 2. विद्यार्थियों की गैर—भागीदारी— शिक्षार्थी जीवन कौशल शिक्षा की कक्षाओं में भाग लेते हैं लेकिन इसमें संचालित गतिविधियों में सक्रिय रूप से भाग नहीं लेते हैं, अंत में मूल्यांकन से बचते हैं क्योंकि उन्होंने सक्रिय रूप से भाग नहीं लिया था।

- 3. माता—पिता द्वारा अस्वीकृति— अधिकांश माता—पिता अपने बच्चों के शैक्षणिक विषयों को पहली वरीयता देते हैं, और उनका मत है कि जीवन कौशल बाद के जीवन में सीखा जा सकता है। उनमें से अधिकांश जीवन कौशल शिक्षा (एल०एस०ई०) को समय की बर्बादी मानते है।
- 4. शिक्षकों को सेवा पूर्व प्रशिक्षण नहीं—सेवा पूर्व शिक्षा के दौरान उच्च शिक्षा प्रणाली में जीवन कौशल शिक्षा के कार्यान्वयन के संबंध में शिक्षकों को कोई प्रशिक्षण नहीं दिया गया।
- 5. सेवाकालीन प्रशिक्षण की अल्प अवधि—जीवन कौशल शिक्षण और मूल्यांकन के विभिन्न पहलुओं पर शिक्षकों में गहन प्रशिक्षण की कमी है। जिससे उच्च शिक्षा संस्थानों में एलएसई के सफल कार्यान्वयन के लिए शिक्षकों की तैयारी का स्तर निम्न है।
- 6. शैक्षणिक विषयों के साथ जीवन कौशल शिक्षा के (एलएसई) को आत्मसात करने के लिए कोई प्रशिक्षण नहीं—जीवन कौशल पाठ्यक्रम के लिए नियमित सेवाकालीन प्रशिक्षण सभी शिक्षकों को उनके शैक्षणिक विषय के साथ एलएसई को आत्मसात करने के लिए प्रशिक्षित करने की आवश्यकता है।
- 7. जीवन कौशल शिक्षा (एलएसई) पृथक पाठचक्रम के रूप में— एलएसई कार्यक्रम सभी उच्च शिक्षा संस्थानों में पृथक पाठचक्रम कक्षा गतिविधि के रूप में चल रहा है, जिसमें शिक्षक एलएसई को शैक्षणिक पाठचक्रम के साथ आत्मसात करने के लिए उन्मुख नहीं है।
- 8. संसाधनों की कमी—जीवन कौशल शिक्षा कार्यक्रम में संचालित गति विधियाँ अत्यधिक संसाधन की मांग करती हैं साथ ही कुशल शिक्षकों की आवश्यकता होती है। लेकिन, उच्च शिक्षा संस्थानों में एलएसई के प्रभावी वितरण के लिए शिक्षण और सीखने के संसाधनों और सहायक सामग्रियों की अपर्याप्तता एक आम चुनौती बन के हमारे समक्ष प्रस्तुत है।
- 9. एलएसई का मूल्यांकन—जीवन कौशल या दक्षताओं को मापने के लिए अधिकांश उपस्थित प्रणालियां अत्यधिक जटिल, समय

लेने वाली है, जिसमें कुशल अंतर्दृष्टि व समझ की आवश्यकता है। परंतु शिक्षकों को एलएसई के मूल्यांकन के लिए प्रशिक्षित नहीं किया गया है।

निष्कर्ष

एनईपी 2020 युवाओं की तेजी से बढ़ती जरूरतों को पूरा करने के उद्देश्य से शैक्षिक परिस्थितियों के पुनर्गठन की दिशा में एक महत्त्वपूर्ण कदम है। एनईपी का अपना दृष्टिकोण युवाओं को प्रशिक्षण और शिक्षा के विभिन्न चरणों में प्रदान किए गए व्यावसायिक, रोजगार परक और उद्यमशीलता कौशल के माध्यम से सशक्त बनाना है। उच्च शिक्षा का उद्देश्य एक प्रबृद्ध, सामाजिक रूप से जागरूक, जानकार और कुशल राष्ट्र के विकास को सक्षम बनाना होना चाहिए। जो युवाओं का उत्थान कर सके। जिससे वह समस्याओं के मजबूत समाधान का निर्माण और कार्यान्वयन कर सके। दुनिया बहुत तेजी से बदल रही है। इन बदलती हुई स्थिति की पृष्ठभूमि मां शिक्षा की भूमिका को नए सिरे से निर्मित और पूनर्गित करना होगा। सामाजिक अपेक्षाओं के साथ तालमेल बिठाने और प्रदर्शन में वांछित गुणवत्ता बनाए रखने के लिए, शिक्षक को परिवर्तन के एक शक्तिशाली कार्यकर्त्ता के रूप में कार्य करना होगा। गुणवत्तापूर्ण उ च्च शिक्षा का उद्देश्य केवल व्यक्तिगत रोजगार के लिए अधिक अवसर पैदा करने से कहीं अधिक है: यह अधिक जीवंत, सामाजिक रूप से स्वस्थ सामाजिक संबंधों, खुशहाल व एक जुटता, सुसंस्कृत, उत्पादक, अभिनव, प्रगतिशील और समृद्ध राष्ट्र की कुंजी का प्रतिनिधित्व करता है। वह दिन दूर नहीं जब भारतीय जीवन कौशल शिक्षा को विद्यार्थियों में एक प्रभावी, सकारात्मक सामाजिक और मानसिक स्वास्थ्य को बढावा देने के लिए मनोसामाजिकरण नीति के रूप में स्वीकार करेंगे। जीवन कौशल शिक्षा को प्रशिक्षक, शिक्षक, या परामर्शदाता द्वारा नियमित विद्यालयी पाठ्यक्रम में एकीकृत करना और निरंतर आधार पर प्रदान करना चाहिए। यह निष्कर्ष निकालना संभव है कि, जीवन कौशल शिक्षा विद्यार्थियों के समग्र विकास के लिए आवश्यक है। साथ ही जीवन कौशल छात्रों के व्यक्तिगत और सामाजिक विकास का एक महत्त्वपूर्ण घटक है।

संदर्भ ग्रन्थ सूची

- Botvin, G.J. & Griffin, K.W. (2004). Life Skills Training: Empirical Findings and Future Directions. The Journal of Primary Prevention, 25 (2). Retrieved from https://www.researchgate.net/profile/GilbertBotvin/publication/226086316_Life_Skills_Training_Empirical_Findings_and_Future_Directions/links/02bfe5144a7a6b238f000000/Life-Skills-Training-Empirical-Findings-and-PDF
- Kawalekar, J.S. (2017). The Value of Life Skills in Higher Education. IOSR Journal of Research & Method in Education, 7(3), 43-46. Retrieved from https://iosrjournals.org/iosr-jrme/papers/Vol-7%20Issue-3/Version-5/H0703054346.pdf
- Moshki, M., Hassanzade, T. & Taymoori, P. (2014). Effect of Life Skills Training on Drug Abuse Preventive Behaviors among University Students. International journal of preventive medicine. 5. 577-83.
- डेलर्स, जे. (2010). लर्निंग द ट्रेजर विथ इनः रिपोर्ट टू यूनेस्को ऑफ द इंटरनेशनल किमशन ऑन एडुकेशन फॉर द ट्वेंटी फर्स्टसेंचुरी. यूनेस्कोपब्लिशिंग-Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000109590? posInSet=12&queryId=f9897ad1-e31b-4acf-a2d8-e64997ad28ab
- प्रजापति (2017). सिग्निफिकेन्स ऑफ लाइफस्किल एजुकेशन, कंटेम्पररी इश्यूज इन इंडिया, 1(10), 1–6.
- यंकाह, ई. एग्लटन, पी. (2008). इफेक्ट्स एंड इफेक्टिवनेस ऑफ लाइफ स्किल्स एडुकेशन फ़ॉर एच्.आई.वी.प्रीवेंशन इन यंग पीपल. एड्स एडुकेशन एंडप्री वेंशन,अंक, 6(20), पृष्ठसंख्या— 485-465. DOI: https://doi.org/10.1521/aeap.2008.20.6.465
- यूनाइटेड नेशन्स आफिस ऑन ड्रग्स क्राइम (द.क.). मॉड्यूल फॉर लाइफ स्किल्स. Retrieved from https://www.unodc.org/pdf/youthnet/action/message/escap_peers_07.pdf
- यूनिवर्सिटी ग्रांट कमीशन (2019). करिकुलम फॉर लाइफ स्किल्स. Retrieved fromhttps://www.ugc.ac.in/e-book/SKILL%20ENG.pdf यूनिसेफ कॉम्प्रिहेंसिव (n.d). लाइफ— स्किल्स फ्रेमवर्क.

- Retrieved fromhttps://www.unicef.org/india/sites/unicef. org.india/files/2020-02/Comprehensive-lifeskillsframework.pdf
- राष्ट्रीयसेवायोजना (n.d). भारत सरकार- Retrieved fromhttps://nss.gov.in/
- विश्व स्वास्थ्य संघटन (1994). लाइफिस्किल्स एजुकेशन फॉर चिल्ड्रेन एंड एडल्ट्स इन स्कूल. प्रोग्राम ऑनमेन्टल हेल्थ. जिनेवा.
- वृंदा, एम.एन. राव, एम.सी. (2011). लाइफ स्किल एडुकेशन फ़ॉर यंग अडोलसेंट्स. जर्नल ऑफ इंडियन एकडेमी ऑफ एप्लाइड साइकोलॉजी, अंक, 37, पृष्ठसंख्या— 9—15.
- शिक्षा मंत्रालय (२०२०). राष्ट्रीय शिक्षा नीति २०२०. भारत सरकार.
- सिंह, निवेदिता (2016). लाइफिरकल्स एजुकेशनः नीड्स एंड स्ट्रैटिजीस. स्कॉलरली रिसर्च जर्नल फ़ॉर ह्यूमैनिटीः साइंसेज — इग्लिशलैंग्वेज, अंक 16(3), पृष्ट संख्या— 3806—3800.
- स्वच्छ भारत स्वच्छ भारत अभियान (n.d). भारत एक राष्ट्रव्यापी अभियान है. स्वच्छ भारत चैलेंज-Retrieved from https://swachhbharat. mygov.in/

उच्च शिक्षा और किन्नर समुदायः सपने व अवसर

–ओम प्रकाश चौरसिया¹एवं डॉ. रश्मि जैन²

सारांश

प्रस्तुत शोध पत्र भारतीय परिप्रेक्ष्य में समावेशी शिक्षा एवं सामुदायिक सहभागिता की वर्तमान समय में आवश्यकता एवं प्रमुख चुनौतियों की स्थिति की समीक्षा करने की चेष्टा करता है। आश्रमों, गुरुकुलों से आज स्मार्ट कक्षाओं तक के सफर में दिव्यांगों सिहत कई वंचित समूह—समुदाय आज भी शिक्षा की मुख्यधारा से अलग दिखाई पड़ते हैं। ऐसा ही एक समुदाय जिसे किन्नर समुदाय कहते हैं जिसका उल्लेख अभी तक निर्मित शिक्षा कार्यक्रम तथा शिक्षा नीतियों में कहीं भी नहीं हैद्य हालांकि नई राष्ट्रीय शिक्षा नीति 2020 में इस समुदाय का उल्लेख किया गया है किंतु उच्चतर शिक्षा में किन्नर समुदाय के प्रवेश एवं भागीदारी का स्पष्ट परिचय कहीं भी नहीं मिलता है। इसी अस्पष्ट उल्लेख के कारण आज तक की निर्मित शिक्षा नीति विशेष आवश्यकता वाले समूहों को समाज की मुख्यधारा

¹ शोधार्थी, शिक्षाशास्त्र विभाग, डॉक्टर हरीसिंह गौर विश्वविद्यालय, सागर, मध्य प्रदेश

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से जोड़ने में असफल रही है। विकास व नैतिकता के मुख्य पहलू के रूप में शिक्षा है। अतः शिक्षा के महत्त्व को देखते हुए यह आवश्यक है कि किन्नर समुदाय के अंतर्गत आने वाले बच्चों की शिक्षा पर ध्यान दिया जाए। प्रस्तुत शोध पत्र में अशिक्षा से उत्पन्न होने वाली सामाजिक विकृतियों एवं असमानता से बचने की बात करते हुए समावेशी शिक्षा एवं सामुदायिक भागीदारी की बात कही गई है जिससे इस समुदाय के बच्चे स्वयं को समाज का एक तिरस्कृत भाग न समझकर समाज का ही एक अंग समझें। प्रस्तुत शोध पत्र के द्वारा सभी का ध्यान आकर्षित करने का प्रयास किया गया है कि यह एक महत्वपूर्ण सामाजिक उत्तरदायित्व है कि हाशिए पर पड़े हुए किन्नर समुदाय से आने वाले बच्चों की शिक्षा के संबंध में जानकारी एकत्र की जाये जिससे उन्हें समावेशी शिक्षा में शामिल करते हुए उनको देश तथा समाज में सकरात्मक सहभागिता के लिए तैयार किया जा सके।

मुख्य शब्द— किन्नर समुदाय, उच्च शिक्षा, सहभागिता, राष्ट्रीय शिक्षा नीति 2020

प्रस्तावना

हमारे देश में समय—समय पर शासकों का आना हुआ और इसके परिणाम स्वरुप हमारे देश को भी समय—समय पर भिन्न—भिन्न नामों से जाना गया। यह नाम महज नाम नहीं हैं अपितु विचारधाराएँ हैं। इनकी विविधिता इन नामों से छनकर हमारे इतिहास में अभिव्यक्त होती रही हैं। इन नामों से प्राचीनकाल से वर्तमान काल तक व्याप्त विविधता का पता चल जाता है। हमारा देश भाषा, रंग, खान—पान, मौसम से लेकर जाति, धर्म, सम्प्रदाय, विचारधारा, मानसिकता और परिवारवाद के स्तर पर कदम—कदम पर पृथक दिखाई देता है (द्विवेदी, 2020य कुमार, 2018)। वर्तमान समय तक सामाजिक व्यवस्थाएं सदैव ही एक स्पष्ट शक्ति संतुलन करने और सत्ता पर एकाधिकार बनाएं रखने के लिए समाज के कमजोर व हाशिये के वर्ग को लगातार उपेक्षित करती रही है। इन्हीं सामाजिक शक्तियों व व्यवस्थाओं ने जाति व्यवस्था को 'पेशे' से जोड़कर उसे रूढ़ बना दिया जिससे कि इन सामाजिक व्यवस्थाओं में विद्रोह की भावना शून्य बनी

रहे और आने वाली पीढियाँ जाति आधारित पेशे को भाग्य समझते रहे है और उसका प्रतिकार न कर सके (द्विवेदी, 2020)।यह व्यवस्था पीढी दर पीढ़ी हस्तान्तरित होती रहती हैं और धीरे-धीरे इनसे सम्बंधित मूल साक्ष्य विलुप्त हो जाते हैं और यह पीढ़ी दर पीढ़ी अग्रसर होने वाली व्यवस्थाएं संस्कृति का रूप धारण कर लेती है। जिन वस्तुओं, व्यक्तियों या स्थानों के विषय में तर्कपूर्ण साक्ष्य उपलब्ध न हों या उनकी अत्यधिक उपयोगिता वर्तमान समाज व्यवस्था के लिए न रह गयी हो उन्हें ज्यादातर मिथिक कथाओं के खाते में डाल दिया जाता है। इन मिथिक कथाओं में ऐसे ही एक समुदाय की समाज के लिए उपयोगिता को शून्य मानकर शामिल कर दिया गया है जिसे वर्तमान समाज ने उपेक्षित कर सुविधाओं व इंसानियत के हाशिये की कगार पर खडा कर दिया है (द्विवेदी, 2020)। भारतीय समाज में समाजीकरण की प्रक्रिया बेहद ही जटिल है और हास्यास्पद है। यहां जेंडर और सेक्स दोनों ही अलग-अलग चीजें है। सेक्स जहां जैविक पहचान निर्धारित करता है वहीं जेंडर समाजीकरण की प्रक्रिया है जहां स्त्री को स्त्री होना और पुरुष को पुरुष होना सिखाया जाता है। स्त्री व पुरुष के मानदंडों का पालन कराने के क्रम में समाज हमेशा से किन्नर समुदाय को हाशिये पर रखता आया है (ग्रोवर, 2017) उन्हें समाज में किसी भूमिका के लायक नहीं समझा जाता है (पाण्डेय, 2021)।

'अनुत्पादक' और 'उत्पादक' की साजिश में 'स्त्री बाँझ के रूप में' और 'किन्नर नपुंसक के रूप में' समाज में हमेशा से ही अपमानित होते रहे हैं। किन्नर बच्चों के पैदा होने की खबरें 'मर्दानगी के नाम पर' न केवल छिपाई जाती रही है बल्कि मरने के लिए नदी—नाले में फेंक देना या जमीन में दफन कर देना आम बात रही है यदि कोई किन्नर बच्चा फिर भी इन घटनाओं से जीवित बच जाता है तो उसका जीवन आम बच्चों की तरह नहीं रहता है। हमारे देश की मानसिक स्थिति को लेकर या भावनात्मक संबल के लिए समाज कोई जगह नहीं देता है, जिससे कुंठा व दुश्चिंता में आकर कई बार ऐसे लोग आत्महत्या तक कर लेते है (द्विवेदी, 2020)। धर्म, अर्थ, परिवार, समाज, रोजगार, शिक्षा, चिकित्सा, यात्रा, कला, भाषा, संस्कृति और संविधान तक में इन्हें बहिष्कृत और हाशिये पर ही रखा गया है। आश्चर्य की बात है कि इस समुदाय ने स्वयं के विरुद्ध इतने भयानक

षड्यंत्रों के बाद भी अपने अस्तित्व को मरने नहीं दिया और आज सवाल बनकर हमारे 'सभ्य समाज' के सम्मुख खड़ा है (द्विवेदी, 2020)। आज भले ही सुप्रीम कोर्ट ने इन्हें सरकारी नौकरियों के लिए लिंग सम्बन्धी अहर्ता के लिए पात्र घोषित करवा दिया हो किन्तु आज भी रोजगार हेतु इनके पास न तो पर्याप्त शैक्षिक योग्यतायें है और न ही उच्च शिक्षा प्राप्त करने हेतु सरल अवसर। आज भी किन्नर समुदाय के लिए शिक्षा, रोजगार व सामाजिक सम्मान किसी स्वप्न से कम नहीं है ('किन्नर समुदाय' अब समाज के उपयोगी अंग के रूप में, 2022)।

किन्नर समुदाय

किन्नर समुदाय एक ऐसा समुदाय है जो कि हमारे ही समाज का एक तिरस्कृत भाग है। इसमें शामिल होने वाले सदस्य हमारे इसी समाज में जन्मे शिशु होते हैं जो लिंग के आधार पर हमारे समाज में जन्मे शिशुओं में स्त्री व पुरुष की भूमिका निभाने से भिन्न होते हैं। यह समाज की द्विआधारी लिंग पद्धित से पृथक होते हैं अतः इन्हें हमारा समाज स्त्री व पुरुष से पृथक होने की मान्यता प्रदान करता है। इस समुदाय में आने वाले सदस्य स्त्री व पुरुष दोनों लिंगों की विशेषताएं रखते हैं (मिश्रा, 2017)। समाज उत्पादक और अउत्पादक के मानदंडों पर इस समुदाय को या अन्य तीसरे प्रकार के लिंग की संज्ञा को सामाजिक मान्यता प्रदान नहीं करता



 ${\it Source: https://independentnews.in/parents-left-jeen at-mahant-from-una-because-of-third-gender/}$

है और बिहष्कार करता है (ग्रोवर, 2017; द्विवेदी, 2020; बिसारिया 2016)। किन्नर समाज के अपने कुछ नियम—कानून होते हैं। पहला इसे समाज में पूर्ण स्त्री और पुरुष के साथ संबंध रखना व उन्हें अपने समाज में शामिल करना। दूसरा समलैंगिक संबंधों को विषमलिंगी विवाह की मान्यताओं से बाहर स्थापित करना। तीसरा इस समुदाय के लोगों का सार्वजनिक स्थानों पर भीख मांगना और चौथा वेश्यावृत्ति में सक्रिय होना। किन्नर समुदाय किसी का दिल दुखाने व जीव हत्या को पाप मानता है (गपत, 2018)।

उच्च शिक्षा में किन्नर

बदलते परिदृश्य में अभी तक उच्च शिक्षा में किन्नरों के नामांकन का आंकडा नहीं मिलता है। यदि इससे अधिक का आंकडा उच्च शिक्षा में किन्नरों के नामांकन का है भी तो वह कहीं भी ठोस दस्तावेजों में नहीं है। जो किन्नर उच्च शिक्षा में अभी तक पहुंचे हैं प्रारंभिक स्तर से वह या तो पुरुष अथवा स्त्री लिंग के रूप में नामांकित हुए हैं। हालांकि नए आंकड़ों के लिए वर्तमान में किन्नर समुदाय के लिए आवेदन पत्रों में तृतीय लिंग के चयन का अवसर प्राप्त है किंतू सामाजिक उपेक्षा का सर्वाधिक समावेश उच्च शिक्षा के स्तर में ही मिलता है जिससे अभी भी बहुत अच्छा परिणाम नामांकन की संख्या में देखने को नहीं मिल रहा है। 21वीं सदी में एक दशक गुजार देने के बाद भी लोगों की सामाजिक, मानसिक सोच में व्यापक परिवर्तन नहीं हुआ है। बेटियों को गर्भ में मारने की कुप्रवृति चल ही रही है, दहेज का दानव विकराल होता ही जा रहा है, महिलाओं को दोयम दर्जे का समझने की मानसिकता कम नहीं हुई है। ऐसे में किन्नरों के प्रति सामाजिक सोच में एकाएक परिवर्तन आना बहुत मृश्किल है। किसी परिवार में ऐसे बच्चे के जन्म के बाद उसका पालन-पोषण परिवार वालों ने ही किया हो, ऐसा बहुत कम देखने को मिला है। ये समझने की आवश्यकता है कि किन्नर जन्में बच्चे स्वयं में अक्षम हैं, ऐसे में आरक्षण जैसी व्यवस्था तब काम करेगी जब समाज ऐसे बच्चों को स्वीकारना शुरू करे। अपने आरंभिक जीवन-काल से ही ऐसे किसी बच्चे को तिरस्कृत करना शुरू कर दिया जाता है। ऐसे में उसकी शिक्षा, उच्च शिक्षा, रहन—सहन आदि ऐसी स्थितियाँ हैं जिनको आरक्षण से पहले सुलझाया जाना आवश्यक है (ग्रोवर, 2017)।

राष्ट्रीय शिक्षा नीति 2020 और किन्नर समुदाय के लिए उच्च शिक्षा हेतु किए गए प्रयास

राष्ट्रीय शिक्षा नीति 2020 के भाग II के अध्याय 14 के खंड 2 के अंतर्गत राष्ट्रीय शिक्षा नीति 2020 स्वयं स्वीकार करती है कि ''डायनामिक्स और शिक्षा प्रणाली से एसईडीजी के बाहर हो जाने से जुड़े बहुत सारे कारण भी विद्यालय शिक्षा प्रणाली और उच्चतर शिक्षा प्रणाली में समान है। इसलिए विद्यालय शिक्षा और उच्चतर शिक्षा के क्षेत्र में समता, समानता और समावेशन से जुड़ा दृष्टिकोण एक समान होना चाहिए और इसके साथ ही साथ स्थायी सुधार सुनिश्चित करने के लिए इससे जुड़े सभी चरणों में निरंतरता होनी चाहिए। अतः शिक्षा में समता, समानता और समावेशन के लक्ष्यों को पूरा करने के लिए आवश्यक नीतिगत पहलों को स्कूली शिक्षा के लिए भी देखा जाना चाहिए। इन समूहों के बाहर हो जाने से जुड़े कई पहलू है, जो स्वयं में कारण और प्रभाव दोनों है और उच्चतर शिक्षा से विशेष रूप से जुड़े हुए हैं या फिर उच्चतर शिक्षा के क्षेत्र में इनकी जड़े बहुत गहरी है इन्हें उच्चतर शिक्षा में विशेष रुप से दूर किया जाना चाहिए और इसके अंतर्गत उच्चतर शिक्षा के अवसरों की जानकारी का अभाव, उच्चतर शिक्षा ग्रहण करने के दौरान के समय में शामिल आर्थिक अवसरों की हानि, आर्थिक बाधाएं, प्रवेश प्रक्रिया, भौगोलिक बाधाएं, भाषायी अवरोध, बहुत अधिक उच्चतर शिक्षा कार्यक्रम की सीमित रोजगार क्षमता और विद्यार्थियों के लिए उपयुक्त सहायता तंत्र की कमी से जुड़ी चुनौतियों को शामिल किया जाना चाहिए (मानव संसाधन विकास मंत्रालय, 2020)।

राष्ट्रीय शिक्षा नीति 2020 में वर्णित सरकार द्वारा उठाए जाने वाली कदम कुछ इस प्रकार है:

- एसईडीजी की शिक्षा के लिए समुचित सरकारी निधि का निर्धारण
- उच्चतर जीईआर तथा एसईडीजी के लिए स्पष्ट लक्ष्यों का निर्धारण

- उच्चतर शिक्षा संस्थानों की प्रवेश प्रक्रिया में जेंडर संतुलन को बढावा देना
- सार्वजनिक और निजी दोनों ही तरह के उच्चतर शिक्षण संस्थानों में एसईडीजी को अधिक वित्तीय सहायता और छात्रवृत्ति प्रदान करना
- एसईडीजी के बीच उच्चतर शिक्षा के अवसरों और छात्रवृत्ति से जुड़ी जागरुकता के लिए प्रचार प्रसार करना (मानव संसाधन विकास मंत्रालय, 2020)।

राष्ट्रीय शिक्षा नीति 2020 में सभी उच्चतर शिक्षण संस्थानों द्वारा उठाए जाने वाले कदम कुछ इस प्रकार है:

- सामाजिक आर्थिक रुप से वंचित छात्रों को अधिक वित्तीय सहायता और छात्रवृत्ति प्रदान करना
- वंचित शैक्षिक पृष्ठभूमि से आने वाले विद्यार्थियों के लिए ब्रिज कोर्स निर्मित करना
- पाठ्यक्रम सहित उचित शिक्षण संस्थानों के सभी पहलुओं द्वारा संकाय सदस्यों, परामर्शदाताओं और विद्यार्थियों को जेंडर और जेंडर पहचान के प्रति संवेदनशील और समावेशित करना
- भेद भाव और उत्पीड़न के खिलाफ बने सभी नियमों को सख्ती से लागू करना (मानव संसाधन विकास मंत्रालय, 2020)।

उपरोक्त सभी प्रयासों में कहीं भी वंचित समूहों में ट्रांसजेंडर या किन्नर समुदाय जैसे शब्द का स्पष्ट उल्लेख नहीं है, जिसके कारण किन्नर समुदाय के लिए अभी भी यह सभी अवसर रूपी प्रयास मात्र सपनों की तरह ही रहेंगे क्योंकि अस्पष्ट उल्लेख ने इस समुदाय को पुनः एक बार उसी राह पर छोड़ दिया है, जहाँ बाकी की शिक्षा नीतियों ने इसे छोड़ दिया था।

सपने व अवसर

प्रधानमंत्री नरेंद्र मोदी की अध्यक्षता में केंद्रीय कैबिनेट ने 19 जुलाई 2016 को ट्रांसजेंडर पर्सन्स (प्रोटेक्शन ऑफ राइट्स) बिल 2016 को मंजूरी दी। इस बिल के जिए भारत सरकार की कोशिश एक ऐसी व्यवस्था लागू करने की है, जिससे किन्नरों को भी सामाजिक जीवन, शिक्षा और आर्थिक क्षेत्र में आजादी से जीने के अधिकार मिल सके। यह विधेयक भारतीय किन्नरों के लिए मददगार साबित होगा। विधेयक के मुताबिक, किन्नरों को ओबीसी (अन्य पिछड़ा वर्ग) में शामिल करने का प्रस्ताव है। हालांकि, यह तभी लागू होगाजब वे अनुसूचित जाति या अनुसूचित जनजाति में शामिल नहीं होंगे। यानी यदि वे अनुसूचित जाति या अनुसूचित जनजाति का हिस्सा हैं तो उन्हें उसका ही लाभ मिलता रहेगा (ट्रांसजेंडर प्रोटेक्शन बिल 2016)।

सामाजिक उपेक्षा से ग्रसित पढाई छोडने वाले किन्नरों के लिए बिना किसी भेदभाव के उच्च शिक्षा ग्रहण करने हेत् अवसर प्रदान करने के लिए उच्च शिक्षा निदेशालय ने आवेदन पत्रों में ट्रांसजेंडरों के लिए अलग से कॉलम बनाने का निर्देश दिया है। किन्नर अभी भी खयं को समाज की मुख्यधारा से जोड़ने के लिए संघर्षरत हैं। पुरुष व महिला की तरह उन्हें न तो समाज में सम्मान है और न ही अधिकार, जिसके कारण आज तक अधिकतर किन्नर अशिक्षित हैं। (भारतः हाशिए पर रह रहे बच्चों को शिक्षा से वंचित करना, 2014) ''किन्नर अखाडा की प्रयागराज पीठाधीश्वर टीना मां बताती है कि मौजूदा समय में उत्तर प्रदेश में 5000 से अधिक कितना है लेकिन 2200 के लगभग ही 10वीं व 12वीं तक पढे हैं जबकि उच्च शिक्षा ग्रहण करने वालों की संख्या बहुत कम है उम्र के साथ किन्नरों से भेदभाव बढता है। इसके चलते चाह कर भी किन्नर स्नातक व परास्नातक की पढाई नहीं करते हैं उच्च शिक्षा निदेशालय ने ट्रांसजेंडर व्यक्तियों को अधिकार का संरक्षण बिल 2019 को जमीनी स्तर पर लागू कराने की पहल की है। उच्च शिक्षा निदेशक उत्तर प्रदेश के समस्त क्षेत्रीय शिक्षा अधिकारियों राज्य विश्वविद्यालय के कुलसचिव राजकीय डिग्री कॉलेजों के प्राचार्य को निर्देश दिया है" (उच्च शिक्षा के लिए प्रोत्साहित किए जाएंगे किन्नर, प्रवेश के लिए आवेदन फार्म में बनेगा अलग कॉलम, 2020)।

"किन्नर समुदाय के लिए देश का पहला विश्वविद्यालय उत्तर प्रदेश के कुशीनगर जिले के फाजिलनगर में खोला गया है। इस विश्वविद्यालय में

कक्षा पहली से पोस्ट ग्रेजुएशन और पीएचडी की डिग्री हासिल करने वाले छात्रों को रिसर्च करने का मौका दिया जाएगा। यह विश्वविद्यालय अखिल भारतीय किन्नर शिक्षा सेवा ट्रस्ट द्वारा बनाया जा रहा है। शिक्षा की प्रक्रिया पहले से ही शुरू की जा चुकी है। ट्रस्ट के अध्यक्ष डॉक्टर कृष्ण मोहन मिश्रा ने बताते हैं कि वर्ष 2011 की जनगणना के अनुसार करीब ढाई लाख किन्नर है। जिन छोटे बच्चों को लोग छोड़ जाते हैं उन्हें यहां पर शिक्षा दी जाएगी। जो बड़े हैं उनके लिए भी व्यवस्था की जाएगी। इसके लिए टोल फ्री नंबर की व्यवस्था होगी, भारत ही नहीं दुनिया के किसी भी देश के किन्नर यहां दाखिला ले सकते हैं। इस पर विचार विमर्श करने के लिए हमने यूएनओ को भी पत्र लिखा है उन्होंने कहा है कि शिक्षा का अधिकार जब सबके लिए हैं तो किन्नर इससे क्यों वंचित रहे इसी सोच के साथ इसकी पहल की शुरू की गई है यकीनन यह समाज शिक्षित होकर समाज की मुख्यधारा में जुड़ेगा" (उत्तर प्रदेशः कुशीनगर में बनेगा देश पहला किन्नर विश्वविद्यालय, 2019)।

निष्कर्ष

सार रूप में हम यह कह सकते हैं कि किन्नर समुदाय के लिए उच्च शिक्षा आज भी इतने सारे अवसरों के बावजूदभी सपने के रूप में ही प्रतीत होती है जिसका मुख्य कारण अब तक बनी शिक्षा नीतियों में इस समुदाय का अस्पष्ट उल्लेख है। यदि इस समुदाय का स्पष्ट वर्णन कर प्रावधान किये जाते तो शायद इस समुदाय की शिक्षा में नामांकन बढ़ता, किंतु ऐसा मात्र रोजगार संबंधित योजनाओं के अलावा कहीं भी नहीं है। दूसरा प्रमुख पहलू इस समुदाय को हमारे समाज द्वारा उपेक्षित रूप में स्वीकारा गया है जिसकी वजह से इस समुदाय के लोग हमारे समाज की मुख्यधारा के शैक्षिक संस्थानों से भागते भी नजर आते हैं। तृतीय प्रमुख पहलू इनकी शिक्षा पर होने वाले व्यय एवं इनके आवास अथवा शैक्षिक पर्यावरण का अभाव भी इनकी शिक्षा में बाधा का प्रमुख कारण प्रतीत होता है। अतः सरकार को चाहिए कि वह ऐसे आवासीय शैक्षिक संस्थानों की उपलब्धता सुनिश्चित करवाए जिससे कि इस समुदाय से आने वाले विद्यार्थियों को सुरक्षा एवं शैक्षिक सुविधाएँ प्राप्त हो सकें, साथ ही इस समुदाय से आने वाले लोग भी स्वयं को समाज का एक महत्त्वपूर्ण अंग समझ सके और राष्ट्र की प्रगति में सहायक बन सकें।



Source: https://www.gettyimages.in/photos/transgenderchild? assettype=image&sort=mostpopular&phrase= transgender% 20child &license=rf,rm&page=2

सन्दर्भ ग्रन्थ सूची

- n.d. (2020 फरवरी 20), उच्च शिक्षा के लिए प्रोत्साहित किए जाएंगे किन्नर, प्रवेश के लिए आवेदन फार्म में बनेगा अलग
- कॉलम. जागरण. Retrieved from https://www.jagran.com/uttarpradesh/allahabad-city-shemale-will-beencouraged-forhigher-education-separate-column-will-be-made-in-theapplication-form-for-admission20048230.html
- n.d. (2019 दिसम्बर 25). उत्तर प्रदेशः कुशीनगर में बनेगा देश पहला किन्नर विश्वविद्यालय, रखी गई नींव मिलेगी मुफ्त शिक्षा. लेटेस्टली.

- Retrieved fromhttps://hindi.latestly.com/india/foundation-stone-laid-for-first-transgender-primary-central-university-404123.html
- n.d. (2022 दिसम्बर 22). 'किन्नर समुदाय' अब समाज के उपयोगी अंग के रूप में. पंजाब केसरी. Retrieved from https://www.punjabkesari.in/article/news/kinnar-community--now-as-a-useful-part-of-the-society-1738569
- कुमार, विरेन्द्र. (2018). वर्तमान समय में समावेशी शिक्षा की आवश्यकता एवं प्रमुख चुनौतियाँ. सेतु. पिट्सवर्ग, यूएसए. Retrieved from https://www.setumag.com/p/setu-home.html
- ग्रोवर, किरण. (2017). नीरजा माधव के 'यमदीप' में खुला किन्नरों के जीवित यथार्थ का तिलतिल मरताराज. सेतु. पिट्सवर्ग, यूएसए. Retrieved from https://www.setumag.com/2017/03/Research-Article-Kiran-Grover.html
- n.d. (2019 दिसम्बर 27). कुशीनगर में खुलेगा देश का पहला किन्नर विश्वविद्यालय, खर्च होंगे दो सौ करोड़. जागरण. Retrieved from https://www.jagran.com/uttar-pradesh/kushinagar-first-university-for-transgender-community-to-come-up-in-kushinagar-of-up-19881557.html
- गपत, एस. (2018). 21वी सदी की कहानियों में किन्नर विमशर्रू एक जनकृ ती (*बहुभाषी अन्तर्राष्ट्रीय मासिक पत्रिको*), 4(38). द ट्रांसजेंडर पर्सन (प्रोटेक्शन ऑफ राईट) बिल, 2016, पीआरएस.
- द्विवेदी, हर्षिता (2020). किन्नरविमर्शः मिथकों से अधिकारों तक. अपनी माटी. अंक. 32. Retrieved from https://www.apnimaati.com/ 2020/07/blog-post_0.html
- पाण्डेय, अनु. (2021 मार्च 18). किन्नर आत्म कथाओं में अभिव्यक्त किन्नर समाज की पीड़ा. Retrieved from https://sahityasrijan.com/ kinnar-aatmkatha-parityakt-varg-kee-peeda/
- बिसारिया, पुनीत (2016 मई 31). किन्नर विमर्शः समाज के परित्यक्त वर्ग की व्यथा कथा. Retrieved from https://drpuneetbisaria. blogspot.com/2016/05/blog-post_31.html

- भारतः हाशिए पर रह रहे बच्चों को शिक्षा से वंचित करना. (2014 अप्रैल 22). ह्यूमन राईट वाच. Retrieved from https://www.hrw.org/hi/news/2014/04/22/253438
- मिश्रा, एस. (२०१७). भारत में किन्नरों का सामाजिक बहिष्करणरू एक समकालीन अध्ययन. दयाल बाग शिक्षण संस्थान. आगरा. Retrieved from http://shodh-inflibnet-acin:8080/jspui/bitstream/ 123456789/4477/1/ synopsis-pdf

राष्ट्रीय शिक्षा नीति २०२०. मानव संसाधन विकास मंत्रालय, भारत सरकार.

सावित्रीबाई फूले की कविताओं में नारीवादी चेतना, समाज सुधार और स्त्री शिक्षा

—संदीप कुमार¹

सारांश

19वीं सदी के समाज सुधारकों की जब बात की जाती है तो सावित्रीबाई फूले का नाम हमारे जहन में सर्वप्रथम आता है। सावित्रीबाई फूले भारत के सामाजिक एवं शैक्षिक इतिहास में एक असाधारण महिला के रूप में जानी जाती है। उन्होंने महिला शिक्षा एवं सशक्तिकरण की दिशा में तथा जाति एवं लिंग आधारित भेदभाव को समाप्त करने में समाज के पथप्रदर्शक के रूप में कार्य किया।प्रस्तुत शोध पत्र में समाज सुधारक सावित्रीबाई फूले एवं ज्योतिबा फूले द्वारा समाज में व्याप्त कुरुतियों को किस प्रकारदूर करने का प्रयत्न किया है इस पर प्रकाश डालने का प्रयास किया गया है साथ—ही—साथ उनके द्वारा नारीवाद एवं स्त्री शिक्षा के लिए किये गए कार्यों पे भी चर्चा की गयी है।

मुख्य शब्द— स्त्री शिक्षा, नारीवाद, समाज सुधारक

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प्रस्तावना

आधुनिक भारत के इतिहास में सावित्रीबाई फुले संभवतः पहली क्रन्तिकारी महिला हैं जिन्हें एक आदर्श शिक्षाविद्, समाज सुधारक, नारीवादी चिन्तक की संज्ञा देने में कोई अतिश्योक्ति नहीं होगी क्योंकि शिक्षा, समाज और स्त्री चेतना को लेकर उनकी परिकल्पना बहुत गहरी, दूरदर्शी और विस्तृत थी। शिक्षा और समाज सुधार से उनका तात्पर्य शोषण पर आधारित विकृत मानसिकता और मिथ्य्चेतना के स्थान पर वैज्ञानिक आधार और मानवीय मूल्यों पर आधारित समाज स्थापना को सुनिश्चित करना था तथा मुक्तिकामी चेतना का विकास करना था। इस पेपर में हम उनके इस बहुआयामी चिंतन का अध्ययन एवं विश्लेषण करेंगे तथा वर्तमान में उनकी महत्ता और प्रासंगिकता पर प्रकाश डालने का प्रयत्न करेंगे।

सावित्रीबाई फूले एक सामाज सुधारक

सावित्रीबाई फूले का जन्म एक ऐसे समय में हुआ जबकि बंगाल में राजाराम मोहन रॉय (1772–1833), दयानंद सरस्वती (1824–1883) और ईश्वरचंद्र विद्यासागर (1820–1891) जैसे महान समाज सुधारकों ने अपनी सामाजिक सुधार कार्यक्रमों के द्वारा लोगों को जागरूक करना शुरू कर दिया था। उनके सामाजिक सुधार कार्यक्रमीं की गूंज हौले–हौले महाराष्ट्र तक भी पहुँचने लगी थी। इसी कड़ी में ज्योतिबा फूले (1827-1890), सावित्रीबाई फूले (1831 –1897) और फातिमा शेख (1831) जैसे समाज सुधारकों का भी आगमन हुआ। आधुनिक भारत के इतिहास में उपरोक्त सभी समाज सुधारकों की कड़ी में सावित्रीबाई फूले किसी भी मायने में कम नहीं आंकी जानी चाहिए थी क्योंकि उनकी क्रांतिकारी जनचेतना और दूरदृष्टि किसी भी मायने में उन तमाम पुरुष सुधारकों से आगे बढ़कर थी। सावित्रीबाई मात्र सत ही सुधार ही नहीं बल्कि समाजिक ढांचे के अमूलचूक परिवर्तन के प्रति दृढ संकल्पित थी। उन्होंने सामाजिक सुधार के लिए सिर्फ उपदेश नहीं दिया बल्कि नए समाज के सपनों को पूरा करने के लिए हमेशा, हर कीमत पर, सामाजिक परम्पराओं और पितुसत्ता से कदम कदम पर लोहा लेते हुए इंच दर इंच लडाई लडकर, संघर्ष करके महिला समाज और वंचितों के सम्मानपूर्वक जीने के उनके मानवीय हकों को प्राप्त करने सावित्रीबाई फूले की कविताओं में नारीवादी चेतना, समाज . . . 295 का मार्ग प्रशस्त किया। इसके बावजूद विडम्बना यह रही है कि सावित्री बाई को इतिहास के किताब में ज्योतिबा फुले के दंपत्ति के रूप में सीमित रखा गया। यदि कुछ मराठी किताबों को छोड़ दें तो खासकर हिंदी और अंग्रेजी कि पुस्तकों में सावित्री बाई के कार्यों और चिंतन को भुला दिया गया। आज भी उनकी चिंतन प्रणाली को स्कूली किताबों या उच्च शैक्षणिक संस्थानों में शायद ही कोई स्थान दिया गया है। यह कोई संयोग की बात तो नहीं हो सकती कि इतनी डायनामिक सोच रखने वाली महान व्यक्तित्व को हाशिये पर पहुंचा दिया गया।

नारीवादी चिन्तक

अपने समय से काफी आगे देखने और सोचने वाली दूरदर्शी अपने आप में एक पहचान प्राप्त करने वाली, अपने तरीके से अपने रास्ते बनाने और उस पर चलने का साहस रखने वाली सामाजिक रूप से सशक्त, बराबरी का स्थान, भेदभाव रहित शोषण पर आधारित सामाजिक संरचना, सामाजिक दायरे को पार करती एक अलग पहचान बनाने वाली, शोषण, दमन और जुल्म से दबे चीत्कार मारती आधी आबादी कि आवाज बनकर समाज के अंतिम दहलीज पर धकेल दी गईं, गर्त में पड़ी जिंदगियों को बचाने की जिद से चट्टान कि तरह खड़े होकर पित्रसत्ता से बजबजाते नीति नियमों धत्ता बताने वाली संर्घषशील साथिन के रूप में मुक्तिकामी चेतना को घूम-घूमकर महिलाओं में फैलाने और उन्हें सड़े गले व्यवस्था से बाहर निकलने के लिए अपना हाथ बढाकर उन्हें उठ खडे होने की प्रेरणा देने वाली सावित्रीबाई बाई फूले का स्थान आधुनिक भारत के प्रथम नारीवादी चिन्तक के कतर में होना चाहिए क्योंकि उन्होंने वंचित वर्गों और शोषित समाज के लोगों को केवल कोरा उपदेश नहीं दिया बल्कि उनके साथ रहकर, उनके दुखों, कठिनाइयों और जिन्दगी के हर रोज कि जद्दोजहद को समझकर उसका हल ढूंढा और उनके कष्टों में दिल, दिमाग और शरीर से उनके साथ कड़ी रहीं। उनकी इसी दूरदर्शिता ने 1852 में महिला सेवा मंडल नाम से महिलाओं का एक संघ बनाया। इस संगठन ने महिलाओं को बुनियादी अधिकारों और मानवाधिकारों के प्रति जागरूक किया।जाति और पितृसत्ता के गठजोड़ को उसकी सम्पूर्णता में समझती थी इसलिए उन्होंने माना कि जाति और पितृसत्ता नाम के बीमारी को जड़ से खतम करने का इलाज ही असली सामाजिक परिवर्तन कर सता है। उन्होंने महिलाओं के प्रति दोहरे मापदंड को तो उठाया ही लेकिन इस दोहरे मापदंड से पितृसत्ता कैसे जड़ से जुड़ा हुआ है उसको भी उजागर किया और इसीलिए उन्होंने विधवाओं के प्रति समाज की असंवेदनशीलता, शोषण और दमन के खिलाफ लोहा लिया। उन्होंने विधवा पुनर्विवाह का न केवल समर्थन किया बल्कि इसको एक आन्दोलन का रूप दिया। उन्होंने ऐसे महिलाओं और विधवाओं के बच्चों के लिए आश्रम खोले। विधवा महिलाओं के साथ हत्या, बलात्कार और अपमान के साथ उनके तथाकथित नाजायज बच्चों को भी संरक्षण दिया जिनको गर्भ में ही हत्या कर दिया जाता था। ऐसे बच्चों के लिए उन्होंने अनाथालय खोले और उनको सम्मान की जिन्दगी दी। उन्होंने विधवा महिलाओं के बाल काटकर गंजे करने के खिलाफ नाई लोगों को संगठित कर इसके खिलाफ हडताल को संगठित किया। उन्होंने हर वो खतरा मोला जो एक जाति वर्चस्व पर सवाल खडे करने पर और सदी गली प्रथाओं को खत्म करने के कारण मिला। महिला विद्वेष एक जड समाज की कोरी सच्चाई थी जिसको सीधे तौर पर उस समय की महिलाओं ने अपने ऊपर होने वाले अत्याचार, अवहेलना, अपमान के तौर पर झेला है सावित्रीबाई एक ऐसी महानायिका थी जिन्होंने अगवा दस्ते के रूप में ऐसे प्रथाओं का खंडन किया। उनकी जिन्दगी में उतार चढाव और संघर्षों से प्रेरणा लेते हुए महाराष्ट्र की कई ऐसी महिलाएं सामने आई और पितृसत्ता के खिलाफ अपनी आवाज को अपनी लेखनी में बुलंद रखा।

सावित्रीबाई फूले प्रथम महिलाशिक्षाविद के रूप में

आज जब शिक्षा के मौलिक अधिकार के दायरे को बढ़ाने के लिए विभिन्न मंचों, आयोगों और सिमितियों के द्वारा लड़ाई लड़ी जा रही है तब यह नहीं भूलना चाहिए कि शिक्षा को लेकर विस्तृत विमर्श का डंका सावित्रीबाई फूले बहुत पहले ही बजा चुकी थी क्योंकि उनका मानना था कि क्रांतिकारी चेतना का अभाव किसी भी सूरत में समाज के अमूलचुक परिवर्तन के रास्ते को बंद कर देती है। 19वी शताब्दी के भारत में जब महिला खासकर शूद्र महिला के लिए पढ़ पाना एक सपने के समान था या

कहें कि तकरीबन नामुमिकन था तब सावित्रीबाई फुले ने बहुसंख्यक शोषित पीडित आवाम को और खासकर महिलाओं को न केवल सपना देखना सिखाया बल्कि घर-घर में जाकर शिक्षा का अलख जगाया। उन्होंने उस समय के समाजिक परिस्थितियों को भली भांति समझा, धर्म के व्यापार की गहराइयों को समझा, सामाजिक, आर्थिक और मानसिक गुलामी में कैद महिलाओं, किसानों, शूद्रों एवं वंचितों की आवाज बनी। उन्होंने स्वघोषित रूप से विद्यावान ब्राह्मणवादी व्यवस्था के चालाक चरित्र को समझने. परखने और सामाजिक यथार्थ को समझने के लिए दूसरों को भी प्रेरित किया। उन्होंने शिक्षा के माध्यम से न केवल अक्षरज्ञान करना सिखाया बल्कि शिक्षा को उन गूलाम पीढ़ियों की आजादी का हथियार बनाकर उस समय के शोषण पर आधारित ब्राह्मणवादी समाज द्वारा बनाये गए मिथकों को तोड कर वैज्ञानिक सोच विकसित करने पर जोर दिया। उन्होंने अपने जीवन काल के प्रारंभ में ही यह समझ लिया था कि सही मायने में राष्ट्र का विकास तभी संभव है जब पीडित समाज के लोगों को उनके मानवीय हक मिलेंगे और समता के साथ उनका बौद्धिक विकास का मार्ग खुलेगा। अपनी शिक्षा के माध्यम से उन्होंने उन हिन्दू धर्म के मिथकिय पहेलियों पर कटाक्ष करना सिखाया जो वर्ण व्यवस्था की पैठ को समाज में गहरा कर रही थी। उन्होंने मन् के उत्पत्ति के सिद्धांतों को जो वर्ण व्यवस्था पर आधारित थी की चालाकी को आम शोषित जनता के बीच लाकर उसको निराधार साबित करने कि कोशिश की। उन्होंने ऐसी सारी चालाकी और मक्कारी का पर्दाफाश अपनी शिक्षा के माध्यम से किया जिनकी वजह से शूद्रों को अपना गुलाम बनाये रखने और अपने दया भाव पर आश्रित रखने और चाकरी करने को मजबूर करता था। उनकी शिक्षा की यह मुहिम न केवल शैक्षणिक आन्दोलन की थी बल्कि सामाजिक और सांस्कृतिक आन्दोलन की आधारशिला थी। इस मायने में सावित्रीबाई फूले न केवल एक शिक्षिका थी बल्कि एक प्रखर क्रांतिकारी बदलाव की वाहक या नायिका थी जिन्होंने दलितों, शुद्रों और किसानों को यातना, वंचना, अनादर और गरीबी और अशिक्षा के कैदखाने से मुक्त कर तथ्यों और तर्कों से शोषण के पहिये को पंचर करना सिखाया। सावित्रीबाई फुले एक विशाल इदय वाली बहु आयामी व्यक्तित्व की महिलाथीं। जब उन्होंने लड़कियों की शिक्षा पर जोर दिया तब उन्होंने वर्ग, धर्म, जाति के आधार पर भेद नहीं किया। हर वर्ग, धर्म, जाति से आती लडकियों को पढाने के लिए आगे आईं। लेकिन हाँ शिक्षा जगत ने उनके साथ जरुर भेदभाव किया हैं। सवर्ण जाति की महिलाओं के विचारों से, चर्चाओं से सावित्रीबाई नदारद हैं। अधिकांशतः महिलाएं उनका नाम तक भी नहीं जानती हैं। अकादिमक जगत ने उन्हें हाशिए पर डाला है। व्यक्तिगत तौर पर मैं जिस विश्वविद्यालय से सामाजिक विज्ञान का विशेष कोर्स कर रही हूं उसमें सावित्रीबाई का कोई जिक्र नहीं है। यह कितना अन्याय पूर्ण है कि जिस महिला ने न्याय, शिक्षा के लिए संघर्ष किया उसे भारतीय अकादिमक जगत आसानी से हाशिए पर डाल देता है। उनका व्यक्तित्व बहुआयामी था। भारत की समावेशी, वैज्ञानिक, तर्कशील शिक्षा व्यवस्था कि जब भी बात होगी और सावित्रीबाई फुले को उसमे ना शामिल करना हमारी स्वयं कि शिक्षा व्यवस्था पर गहरे सवाल छोड देता है। दोनों का ही असाधारण व्यक्तित्व न केवल उनके समय के समाज को बल्कि पहले से भी ज्यादा आज के समय के पीढ़ी को बहुत कुछ नए तरीके से, तार्किक तरीके से हमारे बुनियादी सोच और समाज के प्रति समझ विकसित करने में बेहद सहायक और प्रेरणादायक है। उनके सोच का बुनियादी आधार था समता, न्याय, भाईचारा और इसी बुनियादी सोच ने उन्हें आगे की अपनी सम्पूर्ण जिन्दगी और व्यक्तित्व को रूप दिया। सावित्रीबाई और ज्योतिबा फूले दोनों शिक्षा को आजादी का रास्ता मानते थे लेकिन उसमें भी अंग्रेजी शिक्षा को सर्वोपरि रखते हैं क्योंकि अंग्रेजी शिक्षा ही उन्हें सम्मान दिला सकती है। ब्रिटिश हुकूमत के आने पर ही ऐसा हुआ था कि शूद्र भी पढ़ सकते थे, जिस शिक्षा से ऊंची जातियां शुद्रों को दूर रखती थीं, फूले दंपत्ति उस विशेष शिक्षा का त्याग कर अंग्रेजी शिक्षा की ओर बढने को प्रेरित करते हैं। सावित्रीबाई शिक्षा को सर्वोत्तम धन कहती हैं और जो व्यक्ति ज्ञान से पूर्ण है वही बाकी लोगों की नजर में ज्ञानवान, सम्मान का अधिकारी है।

शिक्षा किसी भी देश या समाज के विकास का आधारभूत ढांचा होता है। जिस देश की शिक्षा प्रणाली उच्च कोटि की होती है, उस देश का विकास बहुत तेजी गति से करता है। आज दुनिया भर में यह प्रमाणित हो चुका है कि शिक्षा हर एक नागरिक का सम्पूर्ण विकास करती है। एक ओर सावित्रीबाई फूले की कविताओं में नारीवादी चेतना, समाज . . . 299 जहां अधिकांश अफ्रीकी देश केवल 25 से 50 प्रतिशत साक्षरता के चलते गृहयुद्ध की स्थिति में दिरद्री झेल रहे हैं। वहीं, पाश्चात्य देश 100 प्रतिशत के निकट की साक्षरता के चलते फलफूल रहे हैं। भारत में वर्तमान में यह 75 प्रतिशत के आस—पास है। कल्पना कीजिये कि गुलाम भारत में किन किठन परिस्थितियों में फूले दंपित ने महिलाओं को पढ़ाने के लिए कैसे रूढ़िवादी परंपराओं को तोड़कर महिलाओं को आगे बढ़ने की राह दिखाई होगी और देश की आधी आबादी महिलाओं को शिक्षा के माध्यम से मुख्यधारा में ला खड़ा किया होगा? ऐसी योद्धा शिक्षिका और समाज सेविका को हमने बदले में क्या दिया? जिन्होंने सामाजिक कुरीतियों के खिलाफ आवाज उठाई और शिक्षा की अलख जगाईक्या आज शिक्षा के उच्च शिखर पर बैठे लोगों ने सावित्रीबाई फुले के योगदान और बिलदान के साथ न्याय किया?

निष्कर्ष

सावित्रीबाई फूले अपनी समग्रता में बहुयामी सोच वाली महिला सुधारक, चिन्तक, एवं शिक्षाविद थीं। वह पहली असाधारण महिला राजनीतिज्ञों में से एक थी जिन्होंने न्याय के सिद्धांत को सतही रूप से उठाकर उसे वास्तव में धरातल पर स्थापित करने का काम किया। सिद्धांतों को क्रियाशील बनाने में जमीन आसमान का फर्क हैं। वह न्याय को जमीन पर उतरने वाली और दबे कुचले समाज को आवाज देने और संघर्ष का रास्ता बनाने और दिखाने करने वाली असाधारण महिला थी इसलिए उनके कार्य, व्यक्तित्व एवं चिंतन सर्वकालिक एवं प्रासंगिक है।

सन्दर्भग्रन्थ सूची

माली, एम्. जी. (1988). सावित्रीबाई फुले समग्र वांग्मय. महाराष्ट्रः महाराष्ट्रः राज्य साहित्य आणि संस्कृति मंडल.

Alok, N. P. (2016, September 5). Savitribai Phule: A Pioneer In Women's Education In India #IndianWomenInHistory. Feminism in India. Retrieved from https://feminisminindia.com/2016/09/05/essay-life-savitribai-phule/

Kumar, G.K. (2016, January 3). Savitribai Phule - Epitome of Resistance, Modernity and Empowerment. Round Table India. https://www.roundtableindia.co.in/savitribai-phule-epitome-of-motherhood-modernity-and-empowerment

ओम्बेद्त, गेल. (2004). *ज्योतिराव फुले एंड आइडियोलॉजी ऑफ सोशल* रेवोलुशन. दिल्लीः क्रिटिकलक्वेस्ट.

चक्रवर्ती, उमा (2018). जेंडेरिंग का स्टथफीमीनिस्टलेंस. डेल्हीः सेज पब्लिकेशन. नरके, हरी (2008). दन्यनाज्योती सावित्रीबाई फुले —I- दिल्ली रू एन. सी. ई. आर. टी.

फूले, ज्योतिराव गोविंदराव (1883). कल्टीवेटर्स व्हिप्कोड.

फूले, सावित्रीबाई. (1854). काव्यफुले.

फूले, सावित्रीबाई (1892). बावन कशी सुबोध रत्नाकर.

मुले, संगीता (2020). *सावित्री बाई फुले एंड आई.* दिल्लीः पथे र्सपॉ पब्लिकेशन.

सरदार, ब्रजरंजन मानी एंड पामेला (2008). अफॉरगॉटन लिबेरटरः द लाइफ एंड स्ट्रगल ऑफ सावित्रीबाई फुले. दिल्लीः माउन्टेन पीक.

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