

**Awadh International Journal of  
Information Technology and Education  
(AIJITE)  
(Peer Reviewed Refereed Journal)**

**alfa** *Publications*  
NEW DELHI (INDIA)

# **Awadh International Journal of Information Technology and Education**

**(Peer Reviewed Refereed Journal)**

**ISSN : 2277-8985**

**Published by: Shilpa Goel**  
**for**  
**ALFA PUBLICATIONS**  
4398/5, Ansari Road, Daryaganj,  
New Delhi - 110 002  
Phone: +91-11-23275092  
e-mail: alfapublications@gmail.com

**© Awadh Centre of Education**  
(COMM-IT Career Academy & Institute of  
Vocational Studies)  
Awadh Bhavan,  
FC-31, Sheikh Sarai, Phase - II  
Institutional Area,  
New Delhi - 110017, India

Vol. 11 Issue 1, March 2022  
Periodicity of Publication, Biannual

## **SUBSCRIPTIONS**

Awadh International Journal of Information Technology & Education is published twice a year. All orders accompanied with payment should be sent directly to: **Alfa Publications**, 4398/5, Ansari Road, Daryaganj, New Delhi - 110002

## **ANNUAL SUBSCRIPTION CHARGES**

**TWO ISSUES** Rs. 1500.00 / \$ 100.00 (Overseas)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted or utilized in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner. Application for such permission should be addressed to the publisher.

**PRINTED IN INDIA**

---

## **ADVISORY BOARD**

**Mr. Naushad Khalid**, Managing Trustee, Awadh Public Charitable Trust, New Delhi, India

**Prof. Ilyas Husain**, Director, Awadh Centre of Education, New Delhi, India

**Prof. PK Sahu**, Ex-Dean & Head of the Department, Department of Education, University of Allahabad, India

**Prof. Sunil Kumar Singh**, Professor, Faculty of Education, BHU, Varanasi, India

**Prof. Harjeet Kaur Bhatia**, Professor, Dept. of Educational Studies, Faculty of Education, JMI, New Delhi, India

**Prof. Sangeeta Chauhan**, Professor, GGSIPU, New Delhi, India

**Prof. Mohd. Shafiq**, Professor, Jamia Millia Islamia, New Delhi, India

**Prof. Iqbal Mattoo**, Professor, Dept. of Education, University of Kashmir, Srinagar, India

**Prof. Jessy Abraham**, Professor, Dept. of Teacher Training & Non Formal Education (IASE), JMI, New Delhi, India

**Joanna Madalinska Michalak**, Professor, University of Warsaw, Poland

## **CHIEF EDITOR**

**Dr. Mandira Gupta**, Principal, Institute of Vocational Studies, New Delhi, India

## **EDITORIAL TEAM**

**Prof. Usha Sharma**, Professor, NCERT, New Delhi, India

**Dr. Arshad Ikram**, Associate Professor, Department of Educational Studies, Faculty of Education, Jamia Millia Islamia, New Delhi, India

**Dr. Sajjad Ahmad**, Assistant Professor, Department of Educational Studies, Faculty of Education, Jamia Millia Islamia, New Delhi, India



# Awadh International Journal of Information Technology and Education

---

Volume 11

Issue 1

March 2022

---

## Contents

1. *Critical Analysis of Gender Sensitivity and Sex Education in New Education Policy 2020* 1  
Dr. Mira Mishra & Ms. Swati Chakraborty
2. *Emerging Role of Community in Holistic Teacher Education & NEP 2020* 8  
Dr. Vijay Kumar
3. *Entrepreneurship Education: Bridging the Gender Gap* 19  
Ms. Kriti Guleria
4. *Preparing 21st Century Teachers for ICT based Teaching Learning using TPACK Framework* 25  
Prof. (Dr.) Mohd. Muzahir Ali & Ms. Eram Aziz
5. *Optimal Learning Environments and Support for Children with Special Needs* 31  
Dr. Abhinav Kumar (PT) & Ms. Shailaja Singh
6. *Preparing Students for Multidisciplinary and Holistic Society* 40  
Ms. Vinita Dhawan
7. *Inclusion and Sustainability in Teacher Education: The Need of the Hour* 44  
Mrs. Aradhana Jha & Ms. Prachi
8. *Contribution of ICT in Enhancing Teacher Education* 48  
Ms. Sapna Rani
9. *NEP-2020: Transformative Roadmap of Education and Teaching in India* 56  
Ms. Tanya Ahuja

# Critical Analysis of Gender Sensitivity and Sex Education in New Education Policy 2020

**Ms. Swati Chakraborty**  
Research Scholar,  
School of Education,  
GD Goenka University

**Dr. Mira Mishra**  
Assistant Professor,  
School of Education,  
GD Goenka University

---

## ABSTRACT

*National Policy of Education 2020 enshrines the universal goal to encompass structural modification by taking forward a new approach in reforming the Indian Education System. The main theme which captured the attention of the public was the idea of equity and inclusivity. Gender discrepancy has always been a prominent issue in our society. There have been plenty of efforts made to erase the existing societal standards of gender roles and expectations by bringing gender equality. This paper is an attempt to analyze the extent of gender inclusivity in the New Education Policy 2020 which will be instrumental in revamping the Indian educational structure and society at large. The paper is divided into themes and explains the missed aspects in the document.*

**Keywords:** Gender sensitivity, Inclusive education, Sex education.

## INTRODUCTION

The New Education Policy 2020 is the third policy in the genre which replaces NEP 1986 which was revised in 1992. According to the Government, the New Education Policy 2020 is formulated based on suggestions from different levels of local bodies which aimed at holistic productivity and contributing citizens for building an equitable and inclusive society with an increased Gross Enrollment Ratio (GER) of 50% by 2035 (*NEP 2020: Making education more inclusive*, 2020). As New Education Policy 2020 aims for equity and inclusion through education and gender equity and inclusion is important in achieving this goal. Gender

equality, in a patriarchal setup, is difficult to achieve, especially when the system is so deep-rooted. Not only do gender disparities harm the gender minorities, but also bring a lot of harm to the male intersection of society that it favors (Chouhan & Gupta, 2021).

The policy seeks to address the many shortcomings of the existing education system. It advocates the UN Sustainable Development Goal 4 and promises to transform the Indian education system into free universal access to quality education by 2040 (Chatterjee, 2020). Sustainable Development Goal (SDG) 4 as outlined by the United Nations strives to bring about an academic revolution in the world of education, and construct a system of teaching that is inclusive and progressive. The importance of analyzing the degree of gender inclusivity of the Indian curriculum is vast, ranging from realizing the SDGs 4 and 5, to bringing the adequate and unbiased representation of gender minorities to the academic sphere, which has been largely male-dominated and biased (Chouhan & Gupta, 2021). To examine gender inclusivity in New Education Policy 2020 the paper has been divided into themes such as

- ♦ *Gender identities and sensitivity,*
- ♦ *Sex Education and Reproductive Health,*
- ♦ *Inclusion and LGBTQ+ Community,*
- ♦ *Digital Education and Access*

## **THEORETICAL BACKGROUND**

### **a. Gender Identities and Sensitivity**

New Education Policy 2020 introduced the Gender Inclusion Fund (section 6, NEP 2020) that focuses on equitable education for girls and transgender students to bring education spending to 6% of Gross Domestic Product (Bhatt, 2020). The policy only refers to girls and women, with a brief mention of transgender students. It does not bring transgender students within the ambit of the "Gender-Inclusion Fund". Though, the section speaks of imparting a special curriculum for transgender students but fails to put forth the necessary tools and methodology to adopt the same (Mathur & Sharma, 2020). Moving further with the idea of inclusion, the policy talks about equitable and quality education for girls and transgender students. However, inclusion means empowering and inclusivity irrespective of someone's age, caste, gender, religion, sexual orientation, education, and all the intersectional identities. According to Sharma & Babbar (2020), while talking about gender-inclusive learning environments, the policy failed at taking into consideration how gender identities are located on an entire spectrum of gender and sexuality and do not fall under binary which creates differential power dynamics. Though 'Gender sensitivity' is mentioned throughout the document, it does not necessarily address the need for systemic and structural change. As Sahni (2020) states the ingrained biases and violence against women which is deeply rooted in the patriarchal social and political setup of the society should be critiqued and questioned.

## **b. Sex Education and Reproductive Health**

Though New Education Policy 2020, has addressed many aspects of inclusivity and flexibility the major aspect is missing that is Sex Education which includes sexual and reproductive health, sexually transmitted diseases (STDs), safe sex, sexual abuse, body image, gender sensitivity, and identity. As explained by Vineeta (2014), ideally sex-related instructions begin at home when the child starts asking questions but unfortunately the parents are unwilling or unable to explain anything in fear of being vulgar. The parents neither tell the meaning of the word 'Sex' nor do they explain to them the physiology of menstruation, or encourage them to ask questions about sex; or give a proper source from they can explore more on the term. Furthermore, she suggests that since parents fail to give their children adequate guidance about sexual and reproductive health, the school must try to make up for their deficiency. The school can give more detailed and systematic teaching than the parents would be capable of. A suitable curriculum should be drafted to cater to the needs of the youth both at the school and university levels. In the universities, attempts should be made to provide sex education. The link between sexual violence and lack of sex education has been studied widely which states that the repression of one's sexuality leads to coercion, abuse, and exploitation (Mukherjee, 2020). When we talk about sex education, we can't exclude menstrual hygiene and reproductive health. Rath (2020) raises a very important question without mentioning sexual and reproductive health, menstrual hygiene, and consent education how the Indian government is going to advocate inclusive and equitable education.

The CBSE syllabus does include "The Adolescent Education Programme" 'but is still a very 'hush-hush' topic. The VII<sup>th</sup>-grade Biology textbook gives unformed and misinformed knowledge on reproduction, contraceptives, and sexually transmitted diseases due to ignorance of the teacher and the students' gaze, giggles, and shame making it a taboo topic for discussion. Girls, especially in rural areas are ashamed of bloodshot stains in school due to a lack of gender sensitivity in the education system. The words 'sexuality' and 'sex education' find no mention in the document, it has been incorporated as part of "[e]thical and moral reasoning". "Girls still get some information from their mothers when they attend puberty or before marriage. But boys don't have anyone. Instead, they get their information from their peers who are just as clueless and from the internet. More often than not the information will be inaccurate leading to further problems," said Rao (Mukherjee, 2020). Recalling my own school experience when teachers used to skip the human reproduction part or the uncomfortable gaze and giggles explains a allot how the topic of sex is seen in Indian society. Sex education should not be treated as taboo as it can teach children about the negative and positive sides of sex. Encouraging children to ask questions about a specific topic can prevent them from accessing half or misinformed knowledge from peers or online.



## **INCLUSION AND LGBTQ+ COMMUNITY**

Amidst the fuss over imparting computer and vocational education to children beyond Class 6, the policy neglects considering the broad spectrum of the LGBTQIA+ community. If the stakeholders still fail to break the silence around women's bodily needs with the help of education, then the other well-meant steps like placing women in leadership roles, hiring more female teachers, providing girls with free bicycles and laptops are going to be ineffective. As India is pacing towards Sustainable Development Goals (SDGs), the first step is to authorize all the government-run educational institutions to private ones in vulnerable areas. As Rath (2020) points out the lack of NEP 2020's appropriate coverage on water, sanitation, and hygiene (WASH) sector, sexual and reproductive health and rights (SRHR), homosexuality is going to taint "India's performance in SDG 3 (Good health and wellbeing), SDG 4 (Quality education), SDG 5 (Gender Equality) and SDG 6 (Clean Water and Sanitation)". Though the document talks about inclusion in terms of Socio-Economically Disadvantaged Groups (SEDGs), categorized as gender identities, socio-cultural identities and minorities, geographical identities– villages, small towns, disabilities and socio-economic conditions, etc. (Ministry of Education, 2020). But it does not cover the individuals at different intersections of non-hegemonic forms of masculinities and femininities' (Malik & Shukla, 2019). Just because one does not fit into the standard norms set up by society doesn't make them wrong.

## **DIGITAL EDUCATION AND ACCESS**

As explained in Bhatt (2020) as schools shut across India due to COVID-19, Reeta Kaushik, from an NGO that supports the rights of Dalit women and children, said that a recent survey in their area revealed that just 8% of girls have access to a device. Further, she added that most of the Dalit girls will be left behind due to the new policy's emphasis on digital education, without referring to the infrastructure work that is needed to make this shift. Further, it is stated that a report by the National Commission for Protection of Child Rights indicates that 40% of girls between the age of 15-18 are out of school. And accessibility, affordability, and patriarchal social structures become significant barriers behind this. Moreover, excessive dependence on online classes, open schools, and the national distance learning program, will legitimize domesticity for girls which means that the girls who opt for it will have a degree, but won't practice mobility. It will control their freedom. Though digital learning has potential as an initiative, there is a need for a mixed approach to scrap the barriers such as accessibility and affordability. As stated in Chadha & Saha (2020) the issue of digital divide and deprivation has been present in India even before the COVID pandemic. The main problem with online learning and classes in the country is the issue of equitable access. Along with adequate internet and technology services, access to electronic devices such as computers and smartphones is also important. Digital education can only be beneficial if the digital divide is eliminated through proper structural efforts addressing

concerns of equity, accessibility, and affordability. As far as my personal experience is concerned, while I was working as an RA in one of the slums in Delhi, I observed that most of the families had one device. The preference for the usage of devices in online education was given to boys over girls. As a reason for this, girls were usually left out with no option to proceed further.

## CONCLUSION

On a concluding note, we can say that New Education Policy 2020 is well appreciated to include sensitizing terms that will further change the mindset of the stereotypic society. However, it still missed a few aspects that can be included as to my knowledge. New Education Policy 2020 introduced Gender Inclusion Fund that focuses on equitable education for girls and transgender students. Moreover, a special curriculum for transgender students but it does not necessarily address the need for systemic change. So, while talking about gender-inclusive learning environments and gender sensitivity, the policy failed at taking into consideration that gender identities are located on an entire spectrum of gender and sexuality. Also, it repeatedly mentions the term 'Transgender' as a separate community while talking about gender inclusion and sensitivity. This in turn makes the complete idea of inclusion contradictory. Furthermore, a major aspect of inclusivity and flexibility is missing, to be mentioned sex education, which includes sexual and reproductive health, sexually transmitted diseases (STDs), safe sex, sexual abuse, body image, gender sensitivity, and identity. The basic question that strikes often is, 'How the government is going to endorse inclusive and equitable education when there is no mention of menstrual hygiene, sexual and reproductive health, and consent education?' Adolescent Education Programme, which is a part of the CBSE syllabus, is still a "hush-hush" subject. A suitable curriculum should be drafted to give more detailed and systematic teaching to cater to the needs of the youth both at the school and university level. The policy neglects, considering the broad spectrum of the LGBTQIA+ community. It does not cover the individuals at different intersections of non-hegemonic forms of masculinities and femininities. Though the policy has attempted to go beyond the binaries but missed out on different sexual orientations. There is a need for curriculum change, also all the stakeholders in the education system need to be sensitized and taught about the entire spectrum of gender and sexuality. The policy has stressed digital education but to make this shift, proper infrastructure efforts are needed. Due to the COVID-19 situation, the shift from offline to online classes has proved to be efficient, although having some significant barriers such as accessibility, affordability, and patriarchal social structures. Excessive dependence on digital learning will legitimize domesticity for girls which denotes it will control their freedom. So the girls will have a degree, but won't practice mobility. There is a need for a mixed approach to scrap the barriers such as accessibility and affordability. The main problem with digital learning is the issue of equitable access. Along

with access to adequate internet and technology services, access to electronic devices such as computers and smartphones is also important.

## REFERENCES

- ❖ Bhatt, N. (2020, September 02). Examining India's New Education Policy Through a Gender Lens. Devex. [https://www.devex.com/news/examining-india-s-new-education-policy-through-a-gender-lens-98\\_007](https://www.devex.com/news/examining-india-s-new-education-policy-through-a-gender-lens-98_007)
- ❖ Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/qrj0902027>
- ❖ Cardno, C. (2018). Policy Document Analysis: A practical educational leadership tool and a qualitative research method. *Educational Administration: Theory and Practice*, 24(4), 623–640. <https://doi.org/10.14527/kuey.2018.016>
- ❖ Chadha, K. (2020, September 4). *Digital Literacy in India: Structural constraints and the NEP 2020*. SPRF. Retrieved December 23, 2021, from <https://sprf.in/digital-literacy-in-india-structural-constraints-and-the-nep-2020/>
- ❖ Chatterjee, U. (2020, September 26). *It's nearly 2021, will we finally get a policy that focuses on girl's education?* Youth Ki Awaaz. Retrieved October 23, 2021, from <https://www.youthkiawaaz.com/2020/09/national-education-policy-a-view-through-the-lens-of-female-education/>.
- ❖ Chouhan N. & Gupta A. (2021). The Gender Inclusivity of Academic Curriculum and its Effects on Students. *International Journal of Policy Sciences and Law*, 1(3), 1613-1636. [http://ijpsl.in/wp-content/uploads/2021/07/The-Gender-Inclusivity-of-Academic-Curriculum-and-its-Effects-on-Students\\_Nitesh-Chouhan-Ananya-Gupta.pdf](http://ijpsl.in/wp-content/uploads/2021/07/The-Gender-Inclusivity-of-Academic-Curriculum-and-its-Effects-on-Students_Nitesh-Chouhan-Ananya-Gupta.pdf)
- ❖ Dr Anuja. (2020, August 18). NEP 2020: Making education more inclusive [web log]. Retrieved October 23, 2021, from <https://timesofindia.indiatimes.com/blogs/voices/nep-2020-making-education-more-inclusive/>.
- ❖ Malik , P., & Shukla, A. (2019, July 31). A Missed Opportunity: Addressing Sexuality Education in the Draft Nep. *The Bastion Staff*. Retrieved October 30, 2021, from <https://thebastion.co.in/politics-and/education/a-missed-opportunity-addressing-sexuality-education-in-the-draft-nep/>.
- ❖ Mathur, P., Sharma, S. (2020, October 09). Engendering the National Education Policy (NEP) 2020. *Mainstream Weekly*. <https://www.mainstreamweekly.net/article9983.html>
- ❖ Ministry of Education. (2020). National Education Policy 2020. [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- ❖ Rath, A. (2020, December 1). *Remember how class 8th textbooks would teach reproduction?* Youth Ki Awaaz. Retrieved November 9, 2021, from <https://www.youthkiawaaz.com/2020/12/the-failed-story-of-nep-2020-and-mhm/>.

- ❖ Sahni, U. (2020, October 2). *India's National Education policy 2020: A reformist step forward?* Brookings. Retrieved December 11, 2021, from <https://www.brookings.edu/blog/education-plus-development/2020/10/02/indias-national-education-policy-2020-a-reformist-step-forward/>.
- ❖ Sharma, S., Babbar, K. (2020, August 16). If NEP 2020 Wants Gender Inclusion, Why is it Ghosting LGBTQIA+? The Quint. <https://www.thequint.com/news/education/if-nep-2020-wants-gender-inclusion-why-is-it-ghosting-lgbtqia#read-more#read-more>
- ❖ Vineeta, D. K. (2014). Is India ready to incorporate sex education in academic curricula. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 4(2), 01–06. <https://doi.org/10.9790/7388-04240106>



# Emerging Role of Community in Holistic Teacher Education & NEP 2020

*Dr. Vijay Kumar*  
Associate Professor  
School of Education  
Apeejay Styta University (Delhi NCR)

---

---

## ABSTRACT

*Campus and community are and should be mutually inter-dependent on each other. Working of these two closely presents a wonderful opportunity for both campus and community, more so in the field of teacher education. National Education Policy (NEP) 2020, a wonderful document brought in by the government after a gap of 34 years, is a landmark document and fills the gap in the field of education, which we students of education were feeling for so many years. Engagement of pupil teachers in the community work inculcate amongst them the desirable aptitude, skills and knowledge (ASK) which will prove critical in fulfilling their future role of a teacher. Benefits of experiential learning too can be reaped with the help of this partnership long ago advocated by Mahatma Gandhi. However, keeping in mind, the issues and challenges of 21st century and particularly the new normal due to Covid pandemic, emerging role of community needs to be seen and understood from the new perspective, which is the aim of this paper.*

**Keywords:** Experiential Learning, Community Service, Teacher Education, NEP 2020

## INTRODUCTION

Nature and culture are two important aspects of human society. Hills, oceans, rivers, flora and fauna etc. are parts of nature which makes human life survivable on the earth. Human started living in groups which was a historical event. Group living caused development of another part of the world known as culture. Its culture which makes human life satisfying and beautiful. This culture has developed as an important process of human society. This

culture gets strengthened when it is transferred, preserved and conserved. Family which is the smallest unit of the society, plays a very important role in cultural development. Family also is the first crucial place in the socialization process of the child. After family, when the child grows up, he/she interact with neighbourhood and community which plays their roles respectively to socialize the child and try to make him/her a socially responsible, and productive member of the society.

## **WHY ROLE OF COMMUNITY IS IMPORTANT?**

Community is an integral part of the holistic educational setup for a child. Community helps in the inculcation of those capabilities in the affective, psychomotor and cognitive areas of a child's personality, the attitude, skills and knowledge (ASK) in them which could help them in fulfilling their duties as the a responsible productive citizen, not only of the state or country but the global arena. This is because of the fact that we learn so much while in the community which helps inculcation of social skills like empathy, understanding and concerns towards various social issues like gender discrimination, cleanliness and sanitization, pollution, etc. and develops amongst them values for dignity of labour, sense of belongingness, care and affection towards the Mother Nature, its flora and fauna. Development of these ASK are very important in the life of a student as whatever they do, may be as an engineer, doctor, teacher, designer, lawyer etc., they will be doing it while in the community and spending their future life as a professional or worker in the community itself and understanding the community life, will equip them to creative and innovative to solve various social issues and challenges. For example, if a future engineer visit the community and comes to know the problems being faced by the people in the community, may be related to air pollution, for example, he/she might be feeling motivated enough to create some innovative solutions to the problem like air purifies etc. Some of them could create some new business ideas, some product or institutions. Noble laureate and child rights activist Kailash Satyarthi, who is engineer by profession, started his NGO *Bachpan Bachao Andolan*, when he saw a large number of child labour working. Due to his efforts, lakhs of children working as bonded labour has been freed.

Experiential and Lifelong learning is one of the critical skill required to live successfully in the 21<sup>st</sup> century. Community plays a big role in the education of any lifelong learner. The learning opportunities a community provides has the ability to make education process more enriched and challenging and at the same time, more enjoyable for a learner. Seeing the critical role played by community in the educational and development process of a child, campus-community interaction is advocated by various committee and commissions on education. However, we have not been able to reap the full potential of the community in the educational process of a learner generally and the result is, that majority of our youths passing out of the schools and colleges are not employable. There is a mismatch between what is taught in the educational institutions and what is required by the community. They do not have aptitude, skills and knowledge (ASK) which is required by the institutions

present in the community (economic institutions, political institutions etc.) and therefore unable to contribute positively in the development process of an economy. It is this employability issue which has forced policy makers in the government as well as the researchers to think ways and means to harness the full potential of the community in the educational process of the child, and rightfully, is in the appropriate direction. This paper intends to provide a fresh perspective and innovative ideas to ensure holistic development of the youth by engaging them in the community and to serve as an impetus for dialogue and action.

## **DEVELOPMENT GOALS AND EDUCATION OF THE YOUTH**

Various development goals including sustainable development goals 2030 advocates role of community in the educational process of a learner. Community is a dynamic laboratory for a lifelong learner who does experiments of various types in it and learns ways and means of solving various issues and challenges. There are 17 SDGs and 169 targets and achievement of these goals and targets require a systematic adoption of strategy formation and implementation. Living sustainable development requires more participation from the people worldwide and teaching sustainable development goals too. SDG's fourth development goal aiming to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This goal can't be achieved without the role of community. Due to the importance of community, concept of community based education is in vogue in European countries. So before moving further, let's see, what's happening in the countries of the world which are ahead of us in the development index.

## **ENGAGEMENT OF THE YOUTH IN COMMUNITY BY DEVELOPED COUNTRIES**

Most countries in Europe are advanced countries. Development as indicated by the education, health and demographic factors is of extremely high level in these countries. Plan and policy makers in poor and third world countries try to emulate their developmental plans and policies. Different countries have different aims of education. Aims of educational process have been mistaken by many, even in Europe too. One image<sup>1</sup> from the council of Europe beautifully but sarcastically depicts it below.



*Image 1 An image suggesting the aim of education in Europe (from website of Council of Europe)*

The image 1 easily explains aims of education mistaken by practitioners generally, which generally is considered to be able to get education. In other words, the purposes of education process is generally considered to prepare learners for future life and to get jobs. However, as Dewey said, education is not preparation for life, rather education is life itself. According to such thought process, education is not something which will prepare learners for some future roles but it is everything which learners do in his/her life. So education is life itself. The role of community in such education is very crucial as it will enable learner to understand community in a better way. After all, it is community in which learner will live his/her life. Sensing this role of community, community based educational programmes (CBEPs) have been suggested by the authorities as a successful, effective and efficient strategy for increasing students' learning outcomes, family participation and community and social cohesion. According to an Oxford research document, research has shown that not all CBEPs produce the same effects.

After European countries, USA is considered as a role model. The belief that community has an important role to play in the educational process of a learner have been central to the educational reforms in America. The role of community in the educational process include connections between educational institutions and individuals, economic institutions,



government agencies and NGOs, and other institutions in the formal as well informal arena that can prove to be useful in their educational process and assist them in achieving positive results.

Amongst Asian countries, Japan is the only country which is developed and the role of education in its development is highly important and crucial. Japan places an important emphasis on the role of parents and community after the educational reforms started by the government in the last quarter of the 20<sup>th</sup> century<sup>2</sup>. Lifelong learning in Japan is promoted which includes education in schools, at home and social settings. All students need to be member of at least one school club ((basketball, kendo, English, baseball, tennis, brass band, etc.) which meets after the school hours. The purpose is to inculcate social skills in the students through informal group interaction. Social skills are developed in the students to make them socially responsible and aware citizens of the country. For example, students in Japanese schools voluntarily clean their toilets themselves, following an ideology that it is their duty and responsibility that they should leave a space cleaner if they are using it. It makes them more responsible citizen. It also inculcate amongst them values of dignity of labour and that no work is smaller or menial. The ultimate goal of Japanese education is to foster the student's ability to become a fully integrated and productive member of Japanese society.

## **HOLISTIC EDUCATION AND TEACHER EDUCATION**

Education is a wider concept and should be based on 3 Hs i.e. education of head, heart and head. Education which focusses on 3 Hs is a holistic education. However, not all the practitioners of education, even if they believe in the concept of 3 Hs, equally motivate their students to learn and excel in all the three domains of learning. As mentioned by great Indian philosopher Rabindranath Tagore that '*a lamp can light another lamp when it continues to burn in its flame*', same is applicable to a teacher. If a teacher believes in the concept of holistic education inculcated in him/her during his/her pre-service training, only then he/she would be able to recognise and appreciate the importance of holistic education as a practitioner and will fulfil his/her role to provide holistic education to his/her learners and ensure others to do so when he/she enters into the role of educational leader. Therefore provision of holistic professional education of teachers and their training must also include learnings from all the three domains of learning and head, heart and hand equally should be exposed to learning experiences. Experiential learning for teachers should also be used while educating them and community plays a crucial role in it. Therefore, community has a great role to play in the holistic development of teacher.

## **ROLE OF COMMUNITY IN TEACHER EDUCATION IN INDIA**

Role of community has been always considered important in the educational process of a child. However, in India the role of community has been considered more of an informal

type rather than a formal and active agent of education. Gandhiji's scheme of basic education or *Nai Talim* gave a great emphasis on education of the learners by providing them community like work experiences. He emphasised that development of holistic personality of the learners focussing on head, heart and hand is possible using provisions given in the scheme of *Nai Talim* as was made by Dr. Zakir Husain. Dr. Zakir Hussain, remained Vice Chancellor of Jamia Millia Islamia for more than 2 decades and established Teachers Training Institute, popularly known as TTI. Primary function of TTI was to prepare teachers who will be successfully teaching scheme of *Nai Talim* as per experiential learning processes.

Government after independence, have appointed various commissions and committees on education. One of the most celebrated amongst them was Kothari commissions. It laid emphasis that education should relate to the life, needs and aspirations of the people. It emphasise education should help in improving productivity of the students by focussing on work experience, vocationalisation, and inculcate social, moral and spiritual values in the people. However, seeing the constraints of lack of funds, staff and will power, these aims were underachieved. The role of community, which could play a bigger role in the achievement of these goals, was also not fully harnessed. It could have played a bigger role if teachers would have been prepared considering mutual relationship between teacher and community as critical and role of community as an important resource, ways and means for development of teachers too. Emphasises should be on mutual relationship, and not only on the role of teachers in community development.

Government after independence established some youth organisations, which aimed to involve youth in the community work. These organisations, too can help in the development of teacher trainees. Following organisations associated with education of youths by engaging them in community work were established by the government which aim to engage youth in the community work to make youth socially productive and responsible citizens of the country.

- National Service Scheme (NSS)
- National Cadet Corps (NCC)
- Nehru Yuva Kendra (NYK)

Dr. S. Radhakrishnan advocated NSS for the Youth participation in Nation Building and was launched by Government of India in 1969, the Centenary Year i.e. 100th Birthday of Mahatma Gandhi. NSS operates under ministry of youth affairs and sports, government of India and spreads over length and breadth of the country in its various educational institutions from school level to University level. NSS with the motto of Not Me, But You, aims to create a campus-community linkage scheme for public service by youth. It also aim to ensure personality development of youth through participation in the Community Development and through community services. These aims have been further explained through the various accompany objectives as follows:

## OBJECTIVES OF NSS

- To enable the students to understand the community in which they work.
- To understand themselves in relation to their community.
- To identify the needs and problems of the community and involve them in problem solving process.
- To develop among themselves a sense of social and civic responsibility.
- To utilise their knowledge in finding practical solutions to individual and community problems.
- To develop competence required for group-living and sharing of responsibilities.
- To gain skills in mobilizing community participation.
- To acquire leadership qualities and democratic attitude.
- To develop capacity to meet emergencies and national disasters.
- To practice national integration and social harmony.

*Nehru Yuva Kendras* (NYK) under ministry of Youth Affairs and Sports and NCC under Ministry of Defence have also similar objectives related to the youth and their contribution in the national development by engaging them in community work. *Nehru Yuva Kendras* were established in the year 1972. Objectives of NYK are twofold, first to involve the rural youth in nation building activities. Secondly to develop such skills and values in them with which they become responsible and productive citizens of a modern, secular and technological nation. *Nehru Yuva Kendra Sangathan* has been working in various fronts of youth development with a variety of youth programmes of the Ministry of Youth Affairs and certain special programmes in coordination and cooperation of other ministries. Main focus has been on developing values of good citizenship, thinking and behaving in secular ways, skill development and helping youth to adopt a productive and organized behaviour. Similarly the NCC aims at developing character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens.

Self-motivated and socially aware people have also started schemes or initiatives involving youths in the community work like Youth Red Cross, Guide & Scouts and Interact Club/Rotaract Club by Rotary International.

Participation of teacher trainees in the activities organised by these organisations, can help a lot in developing civic sensibilities amongst the teachers and will make them socially aware and skilled to do better efforts for community's development, not just through teaching work but in multi-dimensional ways.

## **OBJECTIVES OF EDUCATION OF TEACHER TRAINEES BY ENGAGING THEM IN COMMUNITY WORK**

On the basis of aims and objectives of the above given organisations, following points can be mentioned about the engagement of Teacher Trainees in the community work.

1. Community work should help teacher trainees to understand the community in which they work.
2. Community work should help teacher trainees understand themselves in relation to their community.
3. Community work should help teacher trainees identify the needs and problems of the community and involve them in problem solving process.
4. Community work should help teacher trainees develop among themselves a sense of social and civic responsibility.
5. Community work should help teacher trainees utilise their knowledge in finding practical solutions to individual and community problems.
6. Community work should help teacher trainees develop competence required for group-living and sharing of responsibilities.
7. Community work should help teacher trainees gain skills in mobilizing community participation.
8. Community work should help teacher trainees to acquire leadership qualities and democratic attitude.
9. Community work should help teacher trainees develop capacity to meet emergencies and national disasters.
10. Community work should help teacher trainees to practice national integration and social harmony.
11. Community work should help teacher trainees to develop such skills and values in them with which they become responsible and productive citizens of a modern, secular and technological nation.
12. Community work should help teacher trainees in developing character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens.

## **NATIONAL EDUCATION POLICY 2020 AND ROLE OF COMMUNITY IN EDUCATIONAL PROCESS**

National Education Policy 2020 (NEP) is a landmark document in the educational history of the country. It has come after a long gap of 34 years and addresses various challenges of the national and international character. Amongst them is the role of community in the

educational process of the students. It is more critical in the development of the teacher trainees. Most of the educationist all over the world seems to be argued that the community participation plays vital role in promoting education in terms of quality and quantity; and it is assumed that community participation and empowerment has the potential to make major contribution in educating people and enriching their quality of life.

NEP 2020 has acknowledge the fact that providing education to all the citizens of the country is, undoubtedly beyond within the means and capacity of the government and therefore, community has to play a role in providing educational opportunities to the citizens of the country not only by establishing schools and colleges but also organising various socio-cultural and economic opportunities for the participation of students in particular. This is important as education takes place not only in schools but also within families, communities, and society. Despite the various degrees of responsibilities taken by each group, none can be the sole agent to take full responsibility for educating children. Parents and families cannot be the only group of people for children's education as long as their children interact with and learn from the world outside their families, communities and society must support parents and families in the upbringing, socializing, and education of their children. Schools are institutions that can prepare children to contribute to the betterment of the society in which they operate by equipping them with skills important in society. Schools cannot and should not operate as separate entities society. Many research studies have identified various ways of community participation in education, providing specific channels through which communities can be involved in children's education. Role of community in particular becomes very critical in the following areas:

1. Helping researchers and academicians in conducting research studies and data collection;
2. Engaging in dialogue with educational policy makers;
3. Helping public authorities in school management;
4. Assisting public authorities in providing inputs essential for curriculum design and development;
5. Contributing in the development of learning materials;
6. Helping in the school construction and maintenance;
7. Helping in the organisation of various curricular and co-curricular activities;
8. Helping school authorities in assessing learners.

## **CONCLUSION ABOUT THE EMERGING ROLE OF COMMUNITY IN TEACHER EDUCATION PROCESS**

Emerging role of community in the educational process is very critical in 21<sup>st</sup> century. There should be a close and intimate relationship between the campus and the community. It is

like a win-win situation for the both, campus and the community. This is important as what is required to be inculcated in the students, i.e. appropriate aptitude, skills and knowledge, can be done by the educational institutions with the help of the community. Similarly, what is required by the community in its process of development, is available with the young educated citizens of the country. It is these youth, who has enough energy, knowhow which can help in transforming communities from a poor, backward community into a self-reliant, developed area. A community would help in whatever ways possible in organisation and running of the educational activities provided government encourages it and make sufficient efforts. In this line, following points require special mention.

1. **Policy makers should develop enabling curriculum** and initiate curricular reforms making community's role as an active partner in teacher trainees' educational process. Only restricting their role as an inactive agent would not work.
2. **Policy makers should make participation of teacher trainees in community work compulsory.** They should encourage teacher trainees to participate in community work. However, even after doing its best efforts, not all teacher trainees participate in the community work. Therefore, it is imperative that, to get certificate of getting passed some grade or programme, they should compulsorily do some hours of community work. It is important provision as teacher trainees would learn a lot from the community. After passing their programme, they would be serving people, while remaining only in the community. Visiting, understanding and participating in the community life would develop amongst them those capabilities which will make them socially productive and professionally successful.
3. **Train teachers to engage teacher trainees in community work.** Lack of trained teachers, who are expert in engaging teacher trainees in the community work could jeopardise the honest efforts of the government and would not achieve any aims and objectives planned to be achieved through involvement of community in the educational process.
4. **Sensitise community in their vital role** in the holistic development of students' personality, particularly the teacher trainees. An aware and sensitise community would not leave any stone unturned in ensuring organisation of quality learning opportunities for the learners.
5. **Sensitize administration in its role** to be a vital link in ensuring campus-community linkages. This could be done by giving necessary permission to the schools and communities, funds and creating infrastructure and finally eco-system.

To conclude, we can say that community has a great role to play in the educational process of the students in 21<sup>st</sup> century. With the honest efforts of us all, policy makers, educationists and the public at large, the noble aim of a strong, vibrant and developed new India can be achieved.

**REFERENCES**

- ❖ Knipprath, H. The Role of Parents and Community in the Education of the Japanese Child. *Educ Res Policy Prac* 3, 95–107 (2004). <https://doi.org/10.1007/s10671-004-5557-6>
- ❖ The World Youth Report on Youth Civic Engagement, United Nations Department of Economic and Social Affairs, UNO.
- ❖ NEP 2020, MHRD, GoI.



# Entrepreneurship Education: Bridging the Gender Gap

**Ms. Kriti Guleria**  
Assistant Professor  
Army Institute of Education,  
Greater Noida, Uttar Pradesh

---

---

## ABSTRACT

*Success has one tone. It is not distorted by the effects of gender, colour, caste, creed. A country's success depends upon the equal contribution by all the segments of society. History has proved that any society which has ignored a section of society either on basis of race, caste, creed, colour or gender has to pay a heavy price in terms of its overall growth. When we talk about workforce, the workforce of any country comprises of all the sections of the society. Entrepreneurship enables an individual to incorporate innovations, startups, risk bearing, collaboration, competition which are the first steps onto the ladder of success, which is not gender bound. Thus each society must ensure that its citizens rises on the ladder of the economic growth along with each member of the society. A society has brought reforms over years into its various practices which earlier prevailed in the society must think about progressive development. Development can happen when the reforms are initiated from the grass root level. Equal opportunities at home will not only strengthen the focus on girl education, her individuality or safety, but will also open up the avenues of vision of her participation in workforce. It incorporates safety, security, training on skills, childcare facilities, provision of continuing education to ensure the boosting of morale for participation and gender equity.*

**Keywords:** Entrepreneurship Education, gender equity.

## MEANING OF ENTREPRENEURSHIP

Any person is not born as an entrepreneur. Entrepreneurship requires the skills which enables an individual to take up risks and taking up the novel activity, aiming at creation of



wealth and for social cause. Entrepreneurship is the concept of developing and managing a business venture in order to gain profit by taking several risks in the corporate world.

Butler & Jones (1992) defines Entrepreneurship as 'Entrepreneurship is the control and deployment of resources to create an innovative economic organization (or network of organizations) for the purpose of gain or growth under conditions of risk and uncertainty'<sup>1</sup>.

Common elements and characteristics of entrepreneurship can be enumerated as:

- Creativity and innovation
- Resource identification, acquisition, and marshalling
- Economic organization
- Opportunity for gain (or increase) under risk and uncertainty

## **ENTREPRENEURSHIP & EDUCATION**

Education of any country represents its ethical culture, values, morals, and vision for any country's progress. Indian education not only reflects its ethos but also makes one understand its glorious past, invaluable Vedas, rich cultural heritage, great monuments, great Epics and values emanating from them. Our education informs about the intrusions by the invaders on our country, status of Indian society at that particular point of time, sacrifices by our valiant soldiers, their role in Indian freedom, restructuring of the society, reforms in the society. Indian education did not bask in the glory of the past, but with the evolving times it has brought reforms in education through various Policies and Commissions. Each Commission was progressive in its way, along with being futuristic.

As per the University Education Commission (1948-49)<sup>2</sup>, the foremost function of the Indian universities ought to be that they must "strive to serve as the 'conscience of the nation' and assessors of the national way of life". The University Education Commission (1948-49) recommended that "it should be the aim of the universities as our national institutions to undertake research in as many branches of knowledge as possible and to produce an army of trained research workers, who, by their studies, will not only set high standards of intellectual life in scholarship and scientific research but will also actively advance the moral and material progress of the country".

The concerns of education articulated during the freedom struggle were revisited by the National Commissions – the Secondary Education Commission (1952- 53), and the Education Commission (1964-66)<sup>3</sup>. Both Commissions elaborated on the themes emerging out of Mahatma Gandhi's educational philosophy in the changed socio-political context with a focus on national developments (NCF, 2005, p.3). The Commission Report (1952) had envisaged schools to play a crucial role in developing democratic citizenship, emphasizing that "democracy is based on faith and in the dignity and worth of every single "individual",

where the innate worth fullness cannot be eclipsed either by economic or racial or social consideration (SEC, 1952, p.20).”<sup>4</sup>

National Education Commission formed on 14 July 1964<sup>5</sup> under the chairmanship of Daulat Singh Kothari, then chairman of the University Grants Commission, formulated the general principles and guidelines for the development of education from primary level to the highest and advise the government on a standardized national pattern of education in India.

National Policy on Education (1968)<sup>6</sup> aimed to promote national progress, a sense of common citizenship and culture, and to strengthen national Integration. It laid stress on the need for a radical reconstruction of the education system to improve its quality at all stages and gave much greater attention to Science and Technology, the cultivation of moral values and a closer relation between education and the life of the people.

National Policy on Education (1986)<sup>7</sup> intended to raise educational standards and increase access to education. At the same time, it would safeguard the values of secularism, socialism and equality, being promoted since Independence.

National Education Policy (2020)<sup>8</sup> lays particular emphasis on the development of the creative potential of each individual. It is based on the principle that education must develop not only cognitive capacities - both the ‘foundational capacities’ of literacy and numeracy and ‘higher-order’ cognitive capacities, such as critical thinking and problem solving – but also social, ethical, and emotional capacities and dispositions.

Thus we witness the progressive nature of Indian education over a period of time.

## **GENDER AND ITS ROLE IN A COUNTRY’S ECONOMY**

Dixon A. (2018) states that an impressive 133 million Indians rose out of poverty between 1994 and 2012, an achievement that India and the world can be proud of. While worthy of celebration, the success could have been even more dramatic if a greater number of women could contribute to the work force.

Worryingly, India’s rapid urbanization has not yet encouraged more women to join the labor force. After globalisation and privatisation, there is an increasing demand for workforce in the urban areas. Though womenfolk are desirous of taking up the urban jobs, but the lack of safety, security, commutation and other related matters of concerns are acting as a deterrent for them from taking up the jobs.

The comprehensive approach in policy making at government level should be adopted, which not only ensures the equal representation of both the sexes at workplace, but also frame policies, incorporate strategies, revise pay structure to ensure gender equality at workplace. Progress of any country can be accelerated by working together. Both the sexes should be given equal opportunities to participate towards the economic contribution. Efforts should be made at grassroot level to make the home environment gender bias free. Parents

should raise their children with equality and with instilling in them the respect towards the girls. This will be a great step towards saving the society from the menace of domestic violence against the girls.

## **ROLE ENTREPRENEURIAL EDUCATION CAN PLAY IN BRIDGING THE GAP**

Entrepreneurship enhances economic growth not only by enhanced production, but by the way of innovation, competition, creativity & productivity. Many studies have revealed that lack of education and proper training required for expertise in each skill are the most important factors for the gap between male and female entrepreneurs<sup>9</sup>.

In order for any country to progress and prosperous, it is required that the worth of the girls and women should be considered as equal. It will not only reduce the gap in the labour force, but will also help in enhancing the per capita income of the country. Economic independence will not only result in the reduction of poverty, but will also help and augment the earnings towards the welfare of their children and their education, which will in turn lead to overall economic development of the nation. For this to become a reality, there is strong need for encouragement being provided to the girls to take up streams and skills which are in no way belong to boys only. The confidence must be instilled among the girls that they are equally competent in careers like engineering, IT, research, aviation, defence & security. These sectors are not only in high demand, but provide avenues to the girls to explore their talents. This requires proper education, awareness programmes, various avenues & opportunities, training schedules which are sensitive to their needs and requirements, job prospects to be made available to the girls. Efforts should be made to be sensitive to the specific gender needs, may be safe transport, safe travel, safe and hygienic working conditions, flexible time schedule, child care support, incentives to continue with girl's education, guidance and counselling sessions etc will not only ensure safe working environment but will definitely ensure more participation of the females in the growth economy of the nation.

## **CONCLUSION**

Entrepreneurial education is an important and very powerful tool to boost equitable economic growth in any country. For the growth of any country, only the provision of the facilities is not sufficient. What is required is the accessibility and equity along with supportive policies for the females. Supportive and encouraging environment at home, boosting economic and educational policies, futuristic education, progressive vision of the government are some key factors that play a vital role in the development of any nation. Any nation comprises of both male and females, thus leaving or ignoring any one particular sex will bring imbalance in the economic growth of the country. Change doesn't happen overnight, but in order to bring the reforms in the society, some revolution needs to take place. It is sometimes bundled with resistance, disturbance, friction, but these are trivial setbacks when we see a bigger

picture in frame. Thus, the responsibility falls on the shoulders of the individuals and the government, who together should ensure provision of equitable rules, policies, platforms, educational opportunities, safety and security to name a few. We cannot think of the nations development by leaving behind almost half of the population. Any progress is long term only when it is being contributed by the entire population.

## REFERENCES

- ❖ India, Ministry of Education, Report of the Education Commission, 1964-66 Education and national development. New Delhi, Govt, of India; Manager of Publications; 1966; p. 274
- ❖ NCERT, (2005). National Curriculum Framework (NCF, 2005). New Delhi: India MHRD, (2010-11). *Annual Report 2010-11*, Dept. of School Education and Literacy, Govt. of India.
- ❖ MHRD, (1964-66). *Report of the Education Commission 1964-66*, Ministry of education, Govt. of India, New Delhi: India.
- ❖ MHRD, (1998). *National Policy on Education 1986* (as modified in 1992) with National policy on Education 1968, Dept. of Education,
- ❖ MHRD, (1968). *National Policy on Education 1968*, Ministry of education, Govt. of India, New Delhi: India.
- ❖ MHRD, (1986). *National Policy on Education 1986*, Ministry of education, Govt. of India, New Delhi: India.
- ❖ MHRD, Govt. of India. MHRD, (2005). *Report of the CABE Committee on Girls Education and Common School System (2005)*, MHRD, Govt. of India, New Delhi: India.
- ❖ MHRD, (2009). *National Knowledge Commission - Report to the Nation (2006-2009)*, Government of India, New Delhi: India.
- ❖ MHRD, (2009-10). *Report to the People on Education 2009-10*, MHRD, Government of India, New Delhi: India.
- ❖ MHRD, (2011). *Sarva Shiksha Abhiyan - Framework for Implementation*, Dept. of School Education and Literacy, MHRD, Govt. of India
- ❖ MHRD, (1952-53). *Report of the Secondary Education Commission 1952- 53*, Ministry of education, Govt. of India, New Delhi: India
- ❖ Dixon, A. (2018), *The Economic Times Women's Forum*, Mumbai, India
- ❖ Tambunan, T. (2009). Women Entrepreneurship in Asian Developing Countries: Their development and main constraints. *Journal of Development and Agriculture Economics* 1(2), 27-40
- ❖ J. Butler and G. Jones, "Managing Internal Corporate Entrepreneurship: An Agency Theory Perspective," *Journal of Management* 18, 1992: 733-49.

**(FOOTNOTES)**

1. J. Butler and G. Jones, "Managing Internal Corporate Entrepreneurship: An Agency Theory Perspective," *Journal of Management* 18, 1992: 733–49.
2. MHRD, (1964-66). *Report of the Education Commission 1964-66*, Ministry of Education, Govt. of India, New Delhi: India.
3. India, Ministry of Education, *Report of the Education Commission, 1964-66 Education and national development*. New Delhi, Govt, of India; Manager of Publications; 1966; p.274
4. MHRD, (1952-53). *Report of the Secondary Education Commission 1952- 53*, Ministry of education, Govt. of India, New Delhi: India
5. MHRD, (1964-66). *Report of the Education Commission 1964-66*, Ministry of education, Govt. of India, New Delhi: India.
6. MHRD, (1968). *National Policy on Education 1968*, Ministry of education, Govt. of India, New Delhi: India.
7. MHRD, (1986). *National Policy on Education 1986*, Ministry of education, Govt. of India, New Delhi: India.
8. MHRD, (2020). *National Education Policy 2020*, Ministry of education, Govt. of India, New Delhi: India.
9. Tambunan, T. (2009). Women Entrepreneurship in Asian Developing Countries: Their development and main constraints. *Journal of Development and Agriculture Economics* 1(2), 27-40



# Preparing 21st Century Teachers for ICT based Teaching Learning using TPACK Framework

*Ms. Eram Aziz*  
Research Scholar  
Al- Falah School of Education & Training  
Al-Falah University  
Faridabad

*Prof. (Dr.) Mohd. Muzahir Ali*  
Principal  
Al- Falah School of Education & Training  
Al-Falah University  
Faridabad

---

## ABSTRACT

*Education must be adapted to the era. The education framework in the 21st century requires professional teachers who are responsive and alert in dealing with changes and developments. The gap that occurred in the past and the present must be trimmed for the needs of students in the future. Teachers have a central role in realizing the implementation of education in the 21st century. TPACK as the basic framework for 21st century learning becomes the foundation for teachers to achieve learning goals. Professional teachers must have TPACK competencies because TPACK is in line with the main competencies of teachers.*

**Keywords:** TPACK, Digital Competencies, 21st Century Teachers.

## INTRODUCTION

Digital technologies are increasingly substituting the traditional teaching learning in the classrooms and outside. With the inclusion of information and communication technology in education, the access to information has increased manifold. Not only we have greater reach to information but we can create, collaborate and disseminate the information much more easily than before. The integration of technology in education demands the teachers to become the techno-pedagogues, thereby increasing their competencies where they prove to be more efficient and effective in the teaching learning process and transaction of their curriculum. However mere integration of ICT in education will not make the education

process better, rather certain skills are required by the teachers to master for its effective implementation and transformation of the whole education system. Effective ICT integration thus requires teachers to gain proficiency in TPACK, a theoretical framework representing the knowledge that every teacher must confide on to design and implement curriculum and instruction while guiding their students' thinking and learning with digital technologies in various subjects. According to Lee and Tsai (2010) "Techno-pedagogical competency is the art of integrating sound pedagogic principles of teaching/learning with the use of technology. It refers to weaving the techniques of the craft of teaching into the learning environment itself".

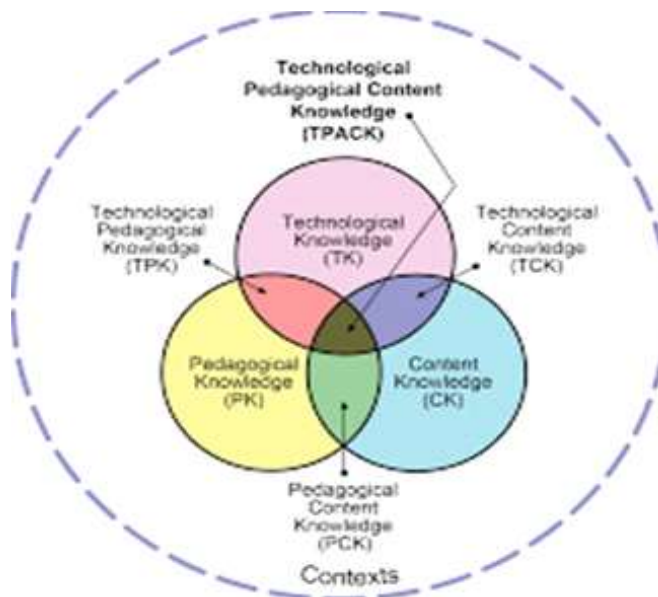
"In TPACK, there are three areas of knowledge, namely: content, pedagogy, and technology. Content is the subject matter that is to be taught. Technology encompasses modern technologies such as computer, Internet, digital video and commonplace technologies including overhead projectors, blackboards, and books. Pedagogy describes the collected practices, processes, strategies, procedures, and methods of teaching and learning. It also includes knowledge about the aims of instruction, assessment, and student learning." (Archambault & Crippen, 2009; Cox & Graham, 2009).

TPACK is a teacher knowledge framework developed by including technology knowledge into the teacher knowledge framework that Shulman (1986) basically determined as "pedagogical content knowledge."

"There are seven components of TPACK model as given by Shulman:

1. **Technological Knowledge (TK):** Technology knowledge refers to how to use computer software and hardware presentation tools & other technologies used in educational contexts.
2. **Content Knowledge (CK):** Content knowledge refers to the teacher's knowledge about the subject matter to be learned or taught.
3. **Pedagogical Knowledge (PK):** Pedagogical knowledge refers to the set of skills teachers must develop and teacher's deeper knowledge about the processes and methods/techniques of teaching & learning.
4. **Pedagogical Content Knowledge (PCK):** Pedagogical content knowledge refers to the knowledge of the subject/topic; psychology of the learner, psychology of learning etc. are the important factors that determine the appropriate selection of the methods/techniques for teaching. For example: art, drama, puppetry, role play, nature rambling, field trips, laboratory method, project method etc.
5. **Technological Content Knowledge (TCK):** Technological content knowledge refers to an understanding of the manner in which technology and content influences one another. Teachers' should be aware of the innovative technologies available in the global market for the effective transaction of the subject matter. For example: Virtual Labs, Virtual field trips, e-library, educational softwares etc.

6. **Technological Pedagogical Knowledge (TPK):** Technological pedagogical knowledge refers to the reciprocal relationship between technology and pedagogy. An understanding of how teaching and learning can change when technologies are used in particular ways. This includes knowing technological tools for appropriate pedagogical designs and strategies. For example, collaborative writing can take place with Google Docs or Google Hangouts instead of face-to-face meetings.
7. **Technological Pedagogical Content Knowledge (TPACK):** TPACK as a synthesized resource of Technological knowledge (TK), Content knowledge (CK), Pedagogical knowledge (PK), Pedagogical content knowledge (PCK), Technological content knowledge (TCK), Technological pedagogical knowledge (TPK) with a focus upon how technology can be uniquely crafted to meet pedagogical needs to teach certain content in specific contexts so as to ensure fruitful learning."



The components of the TPACK framework (graphic from TPACK - Technological Pedagogical Content Knowledge, 2010).



## NEED OF TPACK FRAMEWORK FOR DEVELOPING DIGITAL COMPETENCIES IN TEACHERS

Teachers in the 21<sup>st</sup> century are not sufficient if they only have knowledge of materials and abilities in teaching. Teachers are required to have digital literacy as an integral part of 21<sup>st</sup> century learning. The TPACK framework indicates that teachers need to have a deep understanding of technology, pedagogy, and content in learning and be able to manage them. TPACK is not knowledge that is separate from technology, pedagogy, and content, but there is a harmonious relationship. Teachers have an important role in the TPACK framework. One side is not fulfilled; it will affect the other components. Deep knowledge in technology occupies an important position in TPACK so that learning runs effectively. It does not mean that knowledge of pedagogy and content is not important, the role of both is important, but technology is a new component in the 21st-century learning framework.

According to the National Education Policy 2020, one of the core principles guiding the education system would be the 'extensive use of technology in teaching and learning, removing language barriers, increasing access, and education planning and management.

Students and teachers need to re-imagine traditional learning and teaching methods under the new "pandemic conditions" with interactive learning replacing in-person learning experiences. The policy's introduction is critical and important because it details the vision of education for future generations and will be a crucial tool in the development of a "self-reliant" society.

The importance of applied learning, multiple learning pathways, and resource sharing is emphasized in NEP 2020. There's also the focus on technology-enabled pedagogy beginning in grade 6 and versatile subject combinations. It also paints a positive image of learning that is built on a solid basis of 5 years of activity-based learning and another 3 years of preparation.

*Some of the most important aspects of the technology policy are:*

- **India gone digital** – Investment in digital infrastructure, development of online teaching platforms and resources, creation of virtual laboratories and digital repositories, training teachers to become high-quality online content creators, developing and implementing online tests, and defining content, technology, and pedagogy standards for online teaching-learning are all part of the strategy. The policy calls for the establishment of a dedicated unit to plan the growth of digital technology, digital content, and capacity building for both school and higher education's e-education needs.
- **Education at the primary level** – The policy recognizes the value of technology in assisting teachers, bridging the language gap between teachers and students, building digital libraries, popularizing language learning, and ensuring greater educational access (specifically for differently-abled children). It is also suggested that coding be included in curriculums of school as a necessary skill for students to learn. The

policy also recognizes that technology can be a useful tool in promoting teacher education and promotes the use of online teacher-training platforms.

- **Education administration** – The policy also includes the establishment of an Academic Bank of Credit to digitally store academic credits earned from various HEIs in order to promote the award of degrees based on credits earned over time. The policy's focus on using technology to ensure the quality and accountability of regulatory bodies including the State School Standards Authority and the Higher Education Commission of India, as well as its four verticals – the National Higher Education Regulatory Council, National Accreditation Council, Higher Education Grants Council, and the General Education Council – is an intriguing aspect.
- **Higher and professional education** – The importance of embracing technology in professional education (legal/health) as well as incorporating technology to accelerate the goal of achieving 100 percent literacy (by offering high-quality technology-based adult learning options) has also been raised.
- **Getting used to AI** – The policy acknowledges the problems that have arisen as a result of the widespread use of artificial intelligence and emphasizes the need to adapt to the changes that have occurred as a result of the increased use of AI across sectors. It has charged the NETF with defining and categorizing emergent technologies based on their “potential” and “estimated timeline for disruption,” and presenting a periodic analysis to the MHRD, which will then formally classify those technologies that require appropriate responses from the educational system.

## CONCLUSION

With the era of transformation digital technologies have taken over the world in all aspects of human life. Education system has seen major transformations and a blended mode is the new normal in education. With the implementation of NEP 2020 it has further become imperative and necessary to become digitally empowered. Teachers are the most important towards adapting to this transformative model of education. Looking into the importance of technology the TPACK framework is sure a model to look forward to where it provides a holistic ground for the teachers to be most effective in teaching by not only mastering their subjects and pedagogies but to integrate ICT and use it for the learners in the most effective ways.

## REFERENCES

- ❖ Archambault, L., & Crippen, K. (2009). Examining TPACK among K–12 online distance educators in the United States. *Contemporary Issues in Technology and Teacher Education*, 9(1), 71-88.
- ❖ Devaney, L. (2009, September 9). San Diego explores effective ed-tech integration through TPACK. *eSchool News*. Retrieved December 8, 2010, from <http://>

[www.eschoolnews.com/2009/09/09/san-diego-explores-effective-ed-tech-integration-through-tpack/](http://www.eschoolnews.com/2009/09/09/san-diego-explores-effective-ed-tech-integration-through-tpack/)

- ❖ Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration reframed. *Journal of Research on Technology in Education*, 41(4), 393-416.
- ❖ Koehler, M. J., & Mishra, P. (2005). What happens when teachers design educational technology? The development of technological pedagogical content knowledge. *Journal of Educational Computing Research*, 32(2), 131-152.
- ❖ Schmidt, D. A., Baran E., Thompson A. D., Koehler, M. J., Mishra, P., & Shin, T. (2009). Technological pedagogical content knowledge (TPACK): The development and validation of an assessment instrument for preservice teachers. *Journal of Research on Technology in Education*, 42(2), 123-149.
- ❖ Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- ❖ TPCK – *Technological Pedagogical Content Knowledge*. (2010). Retrieved December 8, 2010, from <http://tpack.org>



# Optimal Learning Environments and Support for Children with Special Needs

*Mrs. Shailaja Singh*  
(Special Educator)  
UPRTOU

*Dr. Abhinav Kumar (PT)*  
BBPS-NTPC

---

---

## ABSTRACT

*The child with special needs having problems like personal, social and many times academics in the school and they feel isolated in their environment and society. Earlier there were only special schools which taken care of these children's problems. But now the philosophy has been changed, special, integration and inclusive approaches have come. The inclusive approach gave lot of emphasis on the educational inclusion of the child without any discrimination. The present paper discusses about the New Education Policies 2019 various provision for optimal learning environment and student support to ensure a joyful, rigorous, and responsive curriculum, engaging and effective pedagogy, and caring support to optimise learning and the overall development of students.*

**Keywords:** Critical pedagogy, critical theory, critical thinking, dialogue, transform, society etc.

## HISTORICAL PERSPECTIVES OF INCLUSIVE EDUCATION

More than half-a-century ago in 1948, the Universal Declaration of Human Rights was adopted by the United Nations General Assembly. In 1975, the same body adopted the Declaration on the Rights of Disabled Persons. Many important Conventions, Declarations and Action Plans have been either ratified, acceded to, or accepted by governments and international and national non- governmental organizations. Those which related directly to "Education for All", particularly disabled children, are The Convention on the Rights of the Child, 1989, United Nations Economic and Social Commission for Asia – Pacific

(UNESCAP) Report in 1999 on "Education for Children and Youth with Disabilities into the 21st Century". The World Declaration on Education for All and its Framework for Action to meet Basic Learning Needs, 1990, Article 3, Clause 5, states "the learning needs of the disabled demand special attention. Steps need to be taken to provide equal access to education to every category of disabled persons as an integral part of the education system." Nothing could be more clearly stated. The Declaration and Framework were accepted with the year 2000 as the target for completion. But today, after the deadline is over, the scenario remains disheartening.

## **INDIAN INITIATIVES TO IMPLEMENT INCLUSIVE EDUCATION**

The Indian Education Commission (1964-66): The Indian Education Commission was the first statutory body to suggest that the education of handicapped children has to be organized not merely on humanitarian grounds, but also on grounds of utility. The Commission observed that although the Indian Constitution had issued specific directives about compulsory education for all, including children with disabilities, very little had been done in this regard. The Commission also emphasized that the education of children with disabilities should be "an inseparable part of the general education system." At the time when the Commission made its recommendations there were less than 250 special schools in India. The Commission set the following targets to be achieved by 1986: education for about 15 percent of the blind, the deaf and orthopaedic ally handicapped and 5 percent of the mentally retarded. The commission also specifically emphasized the importance of integrated education in meeting this target as it is cost-effective and useful in developing mutual understanding between children with and without disabilities.

Integrated Education for Disabled Children (IEDC, 1974): In 1974, the Ministry of Social Justice and Employment, Government of India, initiated the IEDC program to promote the integration of students with mild to moderate disabilities into regular schools. Children were to be provided financial support for books, stationary, transport, special equipment and aides. The governments were provided 50 percent financial assistance to implement this program in regular schools.

National Policy on Education (NPE, 1986-92): In 1986, the Indian Government formulated the National Policy on Education for all government schools and articulated a need to integrate students with disabilities. It emphasized that whenever feasible, the education of children with motor handicapped and other mild disabilities should be provided in regular schools. It also emphasized the need to restructure primary teacher training programs to prepare teachers to deal with the special difficulties of children with disabilities.

Project Integrated Education for the Disabled (PIED, 1987): In 1987, the Ministry of Human Resource development (MHRD) in association with UNICEF and the National Council for Educational Research and Training (NCERT) undertook "Project Integrated Education for the Disabled" (PIED). The aim of the project was to strengthen the implementation of the IEDC scheme.

District Primary Education Program (DPEP, 1994): A centrally sponsored scheme, the District Primary Education Program aims to reduce the overall dropout rates of all students enrolled in primary classes, to raise their achievement levels and to provide primary education for all children, including children with disabilities. This is probably the largest program of the central government in terms of funding.

The Persons with Disabilities Act (PWD Act, 1995): A close examination of the national initiative discussed so far indicates that although the Indian Government had made several attempts to implement integrated education programs; it lacked a firm commitment to promote integration. This was largely because the Indian Government had considered provision for children with disabilities to be a welfare issue rather than an educational imperative. The PWD Act proposed the provision of improved educational services, medical care vocational training, employment, and social security for all persons with disabilities. The Act stated that whenever possible, students with disabilities should be educated in regular school settings.

National Policy on Education (NPE, 2019): In the draft of NPE The vision of India's new education system has accordingly been crafted to ensure that it touches the life of each and every citizen, consistent with their ability to contribute to many growing developmental imperatives of this country on the one hand, and towards creating a just and equitable society on the other. It have the revision and revamping of all aspects of the education structure, its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education, while remaining consistent with India's traditions and value systems. The historic Universal Declaration of Human Rights, adopted at the UN General Assembly in 1948, declared that "everyone has the right to education". Article 26 in the Declaration stated that "education shall be free, at least in the elementary and fundamental stages" and "elementary education shall be compulsory", and that 'education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms'.

## **OPTIMAL LEARNING ENVIRONMENTS**

Effective learning in inclusive set up have requires a comprehensive approach, beginning with a curriculum that is engaging, relevant, and clearly articulates a vision for the desired outcomes. However, even the finest curricula in the world require effective pedagogy to successfully impart the curricular material to students; pedagogical practices determine the learning experiences that are provided to students – thus directly influencing learning outcomes. Additionally, the development of capacities that promote student wellness –such as good health, psycho-social well-being, and sound ethical grounding– are also necessary for high quality learning. Divanajan enrolled at the higher education level are capable of intense effort, commitment, and purposefulness. However, this stage can also be a tumultuous period in the personal, social, and intellectual world of the student. Often, higher education represents the first time in students' lives when they are living and working independently, and the resulting stress and pressures of student.

## **CURRENT CHALLENGES TO EFFECTIVE LEARNING ENVIRONMENTS**

Despite well-meaning efforts over the past decades, the quality of programmes at a majority of our institutions, in both in-class and ODL modes, have been lacking across a number of parameters.

- First, curricula remain rigid, narrow, and archaic. They have too often not responded to the modern advances in disciplinary knowledge in educational practice.
- Programmes do not cultivate a broad
- Knowledge of the Indian context – and its history and culture – or of the global literacy that is required for effective learning in the 21st century, and that is needed to make our programmes attractive and relevant for today’s Indian and global citizens.
- Faculty too often lack the autonomy to design curricula, and this lack of autonomy also negatively impacts pedagogy – indeed, faculty perform best when they are able to teach in their own innovative styles, and when they are able to take into account their own expertise and their own knowledge of students’ needs.
- The rigid curriculum that is transacted, combined with the external assessment of students that follows – with no formal processes for formative assessments in the majority of institutions – ensure emphasis on rote memorisation with little room for critical thinking, creative projects, and discussion.
- Student support is currently almost non-existent at most institutions. While some form of academic support may be available in a few institutions, the quality care that young people may need is generally missing.

## **ENSURING THAT LEARNING ENVIRONMENTS ARE ENGAGING AND SUPPORTIVE FOR ALL STUDENTS TO SUCCEED**

- Institutions and faculty must have the autonomy to innovate on matters of curriculum, pedagogy and assessment, informed by a broad overall framework of higher educational qualifications that ensures consistency across institutions and equivalence across programmes, both in the ODL and the traditional in-class modes.
- Curriculum and pedagogy must be designed by institutions and motivated faculty to ensure a stimulating and engaging learning environment for all students, and assessment must be used to further the goals of each programme.
- Each institution must integrate their academic plans – ranging from curricular improvement to quality of classroom transaction – into the larger IDP.
- Each institution must also be committed to holistic development of students, and create strong internal systems for supporting diverse student cohorts in academic, social and interpersonal domains – both inside and outside formal academic interactions in the classroom.

- Faculty must have the capacity and training to be able to approach students not just as teachers in the classroom, but also as mentors and guides.
- Students from socio-economically disadvantaged backgrounds require particular encouragement and support to make the transition to higher education successfully.
- Providing access is only the first step; continuous support must also be provided. Universities and colleges must be required to set up high quality academic support for educationally disadvantaged
- Groups and must be given adequate funds and academic resources to carry this out effectively.
- ODL provides a natural path to increase access to high quality higher education. In order to leverage its potential completely.
- ODL must be renewed through concerted, evidence-based efforts towards expansion and strengthening, while ensuring adherence to clearly articulated standards of quality.
- ODL programmes must consistently aim to be equivalent to the highest quality in-class programmes available. Programmes, courses, curricula, pedagogy across subjects, including those in both in-class and in ODL modes, as well as student support must aim to achieve global standards of quality. This would also help in having larger numbers of international students studying in India, and provide greater mobility to students in India who may wish to visit, study at, transfer credits to, or carry out research at institutions abroad, and vice versa.
- Courses and programmes in subjects such as knowledge of India and its languages, arts, history, culture, and global context; global literacy; internationally relevant curricula in the sciences, social sciences, and beyond; quality residential facilities and on-campus support; etc. must be fostered to attain this goal of global quality standards and 'internationalisation at home'.

## **MEANINGFUL OPPORTUNITIES FOR SOCIAL ENGAGEMENT FOR ALL SPECIAL NEEDS STUDENTS IN HIGHER EDUCATION INSTITUTIONS**

Students at the undergraduate level to contribute to issues of justice, equity, and development. Such mechanisms should be designed and run to give exposure to students to the pressing issues of the local community, State, and country. To the extent possible, these mechanisms would be integrated within the programme curricula as much as possible. The time allotted for such social engagement for each student should be at least equal to a full one semester course, across the duration of the programme. This could be accomplished through relevant volunteering programmes in local communities, engagement in public social welfare programmes, collaboration with civil society institutions, participation in tutoring or support groups on campus, or other social engagement activities that are equally effective.



## **ASSESSMENT FOR DEVELOPMENT AND NOT JUDGEMENT**

All assessment systems shall be decided by the HEI, including those that lead to final certification. The Choice Based Credit System (CBCS) of the current UGC will be revised and improved, in order to make clear the basic vision while leaving plenty of room for innovation and flexibility. HEIs should move to a criterion-based grading system that assesses student achievement based on the learning goals for each programme – making the system fairer and outcomes more comparable. HEIs should also move away from high-stakes examinations towards more continuous and comprehensive evaluation. Assessment will be comprehensive along all aspects of learning and would be designed to reflect learning experiences along with learning outcomes. Students should be assessed not only on academic aspects but also on the broad capacities and dispositions that are the goals of liberal education. Assessment must provide a basis for frequent reflection by students to assess their progress, and by faculty to further improve the quality of learning experiences being provided. The purpose of assessment must not be to label or rank but to identify areas of strength and areas that need improvement, as students move towards attaining the outcomes defined for their programme. A range of tools and processes for assessment should be used for this purpose, e.g. peer and self-assessment, portfolios, assignments, projects, presentations, and dissertations. The criteria and rubrics for assessment must be determined in a collaborative manner by the faculty and shared with students.

## **CURRICULUM AND PEDAGOGY TO BE INTEGRAL TO INSTITUTIONAL ASSESSMENT & DEVELOPMENT**

The quality of the curriculum, its improvement, the actual quality of classroom transaction, and the learning outcomes of the students shall form an integral part of the IDP of all HEIs. This should be used systematically and judiciously for assessment of the institution, its programmes, and also of its faculty. This may include student evaluations, peer reviews, and other relevant mechanisms. This assessment of the institution may be in the nature of self-assessment for improvement or as part of the accreditation process in the accreditation system.

## **STUDENT SUPPORT FOR LEARNING AND DEVELOPMENT**

- **Academic support for students:** All institutions shall provide academic support to students in addition to regular classes. Institutions shall achieve this through a variety of means appropriate to their individual contexts, e.g., initiatives for improving capacities in given languages, academic reading, academic writing, academic speaking, reasoning, and analysis; focussed support for a particular subject; special (sensible and sensitive) bridge programmes/centres for additional/remedial support; and special tutorials and tutoring programmes and centres. Universities/colleges may choose to offer bridge programmes to students before they enter higher education – this should primarily aim to lessen the impact of social or educational disadvantages.

- **Career support for students:** All institutions will ensure occupational readiness in their students. The curriculum will help students develop capacities for the world of work. In addition, institutions will help students in other ways, e.g. through: placement/counselling assistance to help them clarify their occupational choices, facilitate processes to identify employment opportunities, and set up interactions with potential employers; and workshops and short courses on specific workplace skills that may not be part of the regular curriculum.
- **Physical and emotional health support for students:** Institutions shall create systems and processes, and allocate time to ensure students' physical health and emotional wellness. Facilities for medical care, counselling services, therapy, and treatment in cases of illness or distress will be made available. Institutions must set up strong mentoring programmes by faculty along with peer support programmes (e.g., buddy systems and student support groups). There must be formal student and faculty development initiatives to help everybody value the practice of care and promote conversations among all these groups. These initiatives must help staff and students recognise that care in educational settings eventually resides in the quality of relationships and the responses to interpersonal needs and challenges.
- **Financial support for students:** Financial assistance to students who need such financial support shall be made available. No student will be deprived of higher education because of financial inability. A National Scholarship Fund will be established which will ensure that all students who require financial support to attend a public.
- **Facilities for sports and arts:** All institutions will offer facilities, classes, and clubs for students to participate in activities related to sports and to visual and performing arts. There will be funds set aside for the development and maintenance of such facilities and programmes.
- **Involving students in institutional processes:** Students will be involved in relevant processes and committees of the institution – systems and mechanisms may be set up for this. This will be developed as a mechanism to enhance the educational experiences of students as well as a method for feedback and the needs of students.
- **Topic-centred clubs and activities:** All Institution provides mechanisms and opportunities for funding for topic-centered clubs and activities organised by students (with the help of faculty and other experts as needed), such as clubs and events dedicated to science, mathematics, poetry, language,
- **Physical and emotional health support for students:** Institutions shall create systems and processes, and allocate time to ensure students' physical health and emotional wellness. Facilities for medical care, counselling services, therapy, and treatment in cases of illness or distress will be made available. Institutions must set up strong mentoring programmes by faculty along with peer support programmes (e.g. buddy systems and student support groups). There must be formal student and faculty

development initiatives to help everybody value the practice of care and promote conversations among all these groups. These initiatives must help staff and students recognise that care in educational settings eventually resides in the quality of relationships and the responses to interpersonal needs and challenges – it is not an activity to be executed by specialists but an ethos that informs all relationships.

- **Financial support for students:** Financial assistance to students who need such financial support shall be made available. No student will be deprived of higher education because of financial inability. A National Scholarship Fund will be established which will ensure that all students who require financial support.
- **Facilities for sports and arts:** All institutions will offer facilities, classes, and clubs for students to participate in activities related to sports and to visual and performing arts. There will be funds set aside for the development and maintenance of such facilities and programmes.
- **Involving students in institutional processes:** Students will be involved in relevant processes and committees of the institution – systems and mechanisms may be set up for this. This will be developed as a mechanism to enhance the educational experiences of students as well as a method for feedback and the needs of students.

## CONCLUSION

The present Policy begins with viewing all the aspect of Inclusive education. It focuses all the aspect of education not only normal Student but also all the students of Mainstream who have been dropped their education either their disabilities, cast, religions, age, economical status etc. For the optimal learning in the class room and support of the student the present policy touches all the welfare of the students. Now it is needs all the Institution, University, Schools and Colleges have realized own accountability and help to launching a joyful, rigorous, and responsive curriculum, engaging and effective pedagogy, and caring support to optimise learning and the overall development of students.

## REFERENCES

- ❖ Das, A. K., Pillay, A. N. and Diwaker, (2001), Inclusive education for students with disabilities: The challenge for teacher education. 14th National Seminar on Mental Retardation, Deepshikha, Ranchi - India.
- ❖ Joseph, J. (2006), "A study on opinions of regular primary school teachers towards inclusive education of children with mental retardation", National Institute for the Mentally Handicapped (NIMH) Secunderabad, Andhra Pradesh.
- ❖ Jena, S.P.K., (2004), Priorities of training & attitude of special educators towards people with mental handicap, *Disabilities and Impairments*. Vol. 14 (2), (87-92).
- ❖ Krishnaveni, B. and Pavitra, P (1997), Perceptions of general and special school teachers towards physical disability. *Indian Journal of Mental Health & Disabilities*, Vol. (2), No. 1-2

- ❖ Mani M.N.G. (1999), UNESCO International Institute for Special Education Proposal submitted to the UNESCO and Government of India. Netsearch: <http://www.ICEVI.org>.
- ❖ Mani, M. N. G., (1994), Project Integrated Education for the Disabled- Evaluation Study, Phase 1, UNICEF, New Delhi. Netsearch: <http://www.ICEVI.org>.
- ❖ Mani, M. N. G., (1994), Project Integrated Education for the Disabled- Evaluation Study, Phase 11, UNICEF, New Delhi. Netsearch: <http://www.ICEVI.org>.
- ❖ Puri, M. and Abraham, G., (2004), Handbook of Inclusive Education for Educators, Administrators, and Planners, Unit – 1 Inclusive Education- An Overview, (17- 25)., Sage Publications India Pvt. Ltd, B-42, Panchsheel Enclave- New Delhi.
- ❖ Shanthi, M., (2001), Abstract titled “A Study on the attitude of regular teachers, Resource teachers, Visually Impaired Children, Sighted Children and School Administrators towards inclusive education”, Bharathiar University - Coimbtore.
- ❖ Soni, R.B.L., (2006), Attitudes towards integrated education, Netsearch: Vedams eBooks (PO Ltd., New Delhi., (1996 – 2007). [vedams@vedamsbook.com](mailto:vedams@vedamsbook.com)



# Preparing Students for Multidisciplinary and Holistic Society

*Ms. Vinita Dhawan*  
Assistant Professor  
Rawal College of Education  
Faridabad

---

---

## ABSTRACT

*Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development. National Education Policy 2020.*

*A student must be given attention to help him to succeed and reach his full potential in all aspects of his development. This approach needs to achieve a balance between the home and the environment of the developing child. A holistic and multidisciplinary education of students help to develop all capacities of human beings -intellectual, aesthetic, social, physical, emotional, and moral in an integrated manner. It is the education which a student of 21st century is required. NEP 2020 also aims at developing the holistic and multidisciplinary society in India to lead the country into the fourth industrial revolution.*

**Keywords:** Multidisciplinary, Holistic, Society.

## INTRODUCTION

The idea behind creating multidisciplinary curriculum in context to NEP 2020, is to create a better real-world approach. The multidisciplinary approach that motivates the people to share their knowledge and enhance the depth of learning of self and others would bring the more holistic understanding of the world. It also emphasis the collaboration of skills, to connect the people across disciplines, new learning values to solve any big problems and work collectively with peer group. Some of the areas related to create the same are to be considered effectively.

## **Educational approaches towards STEM**

STEM education refers to the learning experiences of the students related to science, technology engineering and mathematics field. By identifying the need of today's education system and the interest of students, it is created to find the real-world problems and solving them with practical solutions. It primarily deals with educating students from a very young age. Creativity is the mother of inventions and it is at its peak when a child is at a young age, which gradually decreases as they grow up. STEM catches that creativity and also gives direction to a huge amount of energy present in a kid. As an activity-based learning program, it allows students to experiment with new things, takes out the fear of failure from their minds and builds an ample amount of confidence and resilience among them. Confidence building is one of the main advantages of this whole concept. It also encourages them to take new risks. Teamwork is another important aspect of this concept inculcate their habits to work as a team. It also teaches them to be a good team member and a good team leader too.

## **Students according to 21st century capacities**

21<sup>st</sup> century students would meet the dynamic future challenges which needs the design of a holistic school education. It includes a wide range of pedagogical practices and philosophical orientations that include more and more human experiences and into education. Holistic school education would encourage critical thinking, more inquiry, discovery, discussion and analysis-based learning which would develop well rounded individuals equipped with the 21<sup>st</sup> century skills.

## **Promotion of arts and Humanities courses**

Since ancient times the study of arts and humanities gives the knowledge to explore poetry, history, culture and art. in fact It is the need of the present time also to think creatively, critically and to gain insight of various subjects and topics. To interpret the language much better and to enhance communication skills, the promotion of art and humanities courses is needed. The addition of art in STEM i.e. STEAM is about discovering and creating the creative ways of problem solving, integrating principles or presenting information. Without the art we would be a society of think, invent and do. There will be nothing special. The arts are what make our country special. It is what makes us unique.

## **Multiple entry and exit in education**

(NEP) 2020 that restructures school education and higher education systems, aims to transform the Indian education system by making it more holistic, flexible, and multidisciplinary and suited to the 21<sup>st</sup> century needs. The researchers say most of the students dropped their education after class 10<sup>th</sup> or 12<sup>th</sup> due to financial reasons or some other emergencies. Some of the reasons can be students do not find the course or college which excited them. We need to focus on that segment of students who have left their education.

We have to bring them back into the system. The most important aspect is giving them an option of multiple entry and exit points in our education system. This will enable students to shift between vocational education, formal education and the job market. Students can dropout anywhere for a couple of years and come back if they want to complete their education. This is totally a new avenue for students and really can bring a large number of students back into the system.

### **Novel and engaging courses**

In the global economy of the 21st century, the teaching of Science, Technology, Engineering, and Mathematics (STEM) has taken on new importance. All the students who are the part of this STEM literacy, the focus is on students' engagement. Student's interest is promoted towards these novel and engaging courses which will bring the interest interventions among students related to context personalization, problem-based learning and utility value.

### **Community based projects**

In the progressive education movement of 21<sup>st</sup> century that recognizes the interest and creativity of individuals by engaging students in hands on projects. These projects will give opportunity to students to express themselves in the real world. It will develop a child holistically by fostering their psychological, emotional, moral, spiritual and physical growth. It will also develop their love for the education process and will improve their learning to work independently throughout their lives.

### **Value based education**

Value based education is the need of the hour. Every single action of a human being has its value. The values present a true perspective of development of a society or nation. Providing the value-based education will cultivate the moral sensitivity among individuals to develop more than just a society. To promote the humanitarian approach more and more values to be inculcated in the youth that would result into building a great nation. If the values inculcated in students are good the life will be peaceful and useful. Value based education makes us a complete human leading to take society and the country on the top.

### **Opportunities to improve employability**

As a part of holistic education students of all higher education institutions will be provided with the opportunities to improve their employability skills. Local industry, business houses, artists etc. can conduct many Internships program to give students experiences in the career field that they want to pursue. Not only does this give individuals an edge over other candidates when applying for jobs, but it also prepares them for what to expect in their field and increases their confidence in their work. Second, it can help students to improve their industrial skills. Students can learn a lot about their strength and weakness and also have a unique learning opportunity skill. On the other side research internship to be encouraged to give students a great experience in the field they are moving to.

## Focus on immersed areas of research and innovation

Quality researches add some significant knowledge and proves to be a socially valuable outcome received by the society as a whole. It generates the knowledge with practical applications. In this context those areas of researches should be promoted which needs more personal involvement of students with the object of the study. Interdisciplinary education as a comprehensive approach also addresses the social, emotional, ethical and academic needs of students and stimulate innovations to solve the complex problems in the society.

## CONCLUSION

The goal of holistic and interdisciplinary education is to cultivate all the attributes of a human personality. It nurtures students with varying educational levels and learning capabilities from multiple perspective. interdisciplinary knowledge and its application led to greater creativity. The learning becomes meaningful, purposeful and deeper resulting in connecting to the real-world context and holistic development that supports the constructive paradigm in the society.

## REFERENCES

- ❖ Aithal, S.P., Aithal, S. (2020). *Analysis of Indian National Education Policy 2020 towards achieving its objectives*. International Journal of Management, Technology and Social Sciences (IJMTS) ISSN :2581-6012, Vol. 5, No.2, August 2020.
- ❖ Kalaivani, A. (2018). *Holistic Approach of value-based Education: Issues, Directions, Opportunities and Challenges*. International Journal of Science and Research (IJSR) ISSN(Online): 2319-7064 Volume 7 Issue 4 April 2018.
- ❖ [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- ❖ <https://bestrongintl.org/articles/what-are-the-benefits-of-holistic-education>





# Inclusion and Sustainability in Teacher Education: The Need of the Hour

**Ms. Prachi**

*Pupil Teacher,  
Institute of Vocational Studies  
Delhi*

**Mrs. Aradhana Jha**

*Assistant Professor  
Institute of Vocational Studies  
Delhi*

---

---

## ABSTRACT

*Equal chances, as stated by many sustainable development targets, is a goal to be attained in a sustainable society. Inclusive education refers to everyone's right to education, ensuring everyone's presence, participation, and advancement, as well as equal opportunities. However, it is a dual and controversial issue today, as it appears in international and European policies and objectives, but its implementation and development are still away from being a right with guarantees. Moreover, the concept of integration is still prevalent in many places and educational practices. As a result, the goal of this research is to determine which integration and inclusion strategies promote equitable opportunity. The study provides empirical research findings as a key novelty, providing a scientific basis for this equal-opportunity process. The findings demonstrate that features of inclusion (measures of diverse awareness, strong understanding of inclusion, and system adaptation to inclusion) have a considerable positive impact. The findings are relevant to educational policies, decision-making, and strategies for achieving long-term sustainability and inclusivity in the classroom.*

**Keywords:** Inclusive; Sustainable; Teacher Education; Opportunity; Learning environment.

## INTRODUCTION

When we talk about equitable learning possibilities, we don't imply that everyone should acquire the very same things, at same moment, and in the same way. It means that everybody gets equal access to higher education, regardless of their academic standing. As a consequence, when we talk about equal opportunity, we're talking about the bringing all together and

respect for different viewpoints. As a result, the schooling institution must provide all pupils with equal opportunity, regardless of ability. Equal opportunities are a primary challenge for inclusive education. Serious issues of human rights and fair opportunity are at the core of the inclusive education approach. Regardless of the child's individual qualities, every child should be able to learn in his or her local elementary school as often as feasible. Approaches to disability that are 'segregated' or 'integrated' should be avoided or phased out.

## 1. INCLUSIVE EDUCATION AND SUSTAINABILITY

- ◆ Inclusive education provides a safe learning environment for impaired pupils. Inclusive education is a pressing necessity.
- ◆ In a country such as India, where the population is exploding, inclusive education is critical. In India, there are a large number of children who are physically, cognitively, financially, and socially challenged. Mentally and physically challenged kids should not be the only ones who benefit from Inclusive Education. However, students with financial, social, or family difficulties are also welcome.
- ◆ Only an instructor has the capacity to comprehend a student's concerns. Students having these challenges can be recognized by the teacher. He can also come up with an appropriate answer.
- ◆ If a teacher is well-trained and has a variety of skills, he would be capable of delivering superior solutions. Learning is highly recognized as a key developmental tool for achieving social welfare, long-term growth, and better governance.
- ◆ Lastly, education is a vital catalyst for achieving larger development objectives that should be at the forefront of international agenda. Education is widely recognized as a critical development tool for achieving social welfare, long-term growth, and good governance.
- ◆ We must focus on two important concepts in required to bring out any type of social project based on equity: **inclusive education and sustainability**.
- ◆ Educational inclusion, like any other idea or value, is useless without a guarantee of long-term viability. In this regard, we must not overlook "A primary goal of education is to educate students and young people for long-term success." Lifestyles, both locally and internationally, within sustainable communities and ecosystems a dedication to "Inclusive ideals imply a commitment to future generations' well-being.
- ◆ Teacher education in poor nations is ineffective due to a lack of both quality and reach. As a result, many teachers are unable to meet the specific learning needs of students in their classes, especially when dealing with big groups. In many nations, there is a disconnect between classroom realities and early teacher preparation, which can be both didactic and theoretical.

- ◆ Teacher education must be handled through a Continuous Professional Development model that includes school-based practice and mentorship components in order to improve effectiveness. One of the most important first steps should be to guarantee that beginning teacher preparation prepares teachers to recognize and respond to the many needs of children, including those with disabilities.
- ◆ The main task is to identify and address the long-term consequences of making schools more inclusive throughout the educational system. We need to make sure that sector plans take an inclusive approach to issues like teacher supply and react to concerns like, “Are there enough classroom support assistants and special needs teachers, and are they dispersed effectively?” Other crucial actors, such as district officials, must also be considered, as well as the relationships that inspectors and advisers have with their communities.
- ◆ Teacher education programs are usually structured around the ideas of several sorts of educators for various student groups, such as elementary, secondary, subject specialist, general, or special education teachers.
- ◆ While these programs may contain classes that address various dimensions of diversity or differences, they are frequently offered as a stand-alone course or as a programme option rather than as an integrated part of teacher preparation.
- ◆ Specialist options are available to enable teachers to pursue further education or higher degree study in specific areas such as special educational needs, even in nations where there are fewer types of application leading to teacher professional status.
- ◆ The roots of inclusive education and development as a component of the sustainable development aim are explored in this chapter. It examined at how issues of diversity and difference have long been, but in many circumstances still are, viewed as specialist expertise, with the responsibility of educating teachers for inclusive classrooms being primarily carried out by special educators in university departments of special education.

## CONCLUSION

As a response, it has been limited to primarily two special education teachers. However, as the world's school demographics become more varied, it is becoming highly significant for all instructors to be prepared for teaching techniques. These calls are reflected in **UNESCO (2017)** policy guidance on inclusive education an in recommendation of supranational body is such as **the European commission (2018)**. In order to respond to this request, it is necessary to assess existing understanding and activities related to teacher training. The four distinct understandings of inclusive education identified by Goransson and Nilholm's (2014) review of inclusion as: placing students with special needs in mainstream classrooms; meeting the social/academic needs of people with disabilities; and future development and growth all have consequences for teacher education, and these were described in terms of legacy and

equity issues that half address long-standing and curing problems. The chapter stated that mending teachers for inclusive education in many parts of the globe requires agreement on a value that may guide practical growth. Such agreement would create a framework inside which comparative research on the efficacy of the various methods to educator education discussed in this chapter could be carried out. This work is necessary to fulfill international commitments to achieve sustainable development goals, as well as to ensure that differences in the shape and structure of teacher education within and between countries do not become an obstacle to preparing teachers to integrate a principal approach to inclusive education. Addressing disparities and context differences is vital, but overcoming the hurdles to opportunities that exist in a globalized world with so much variation in context requires a rational strategy. By defining the information, abilities, and values of inclusive education as a fundamental right, a justified approach allows for variance in circumstances. While it is important to consider what inclusive education means in various regions and the impacts for teacher development in different regions of the world, differences in the shape and structure of different education within and between countries do not have to be an obstacle to supporting all educators in implementing a principled approved inclusive education.

## REFERENCES

- ❖ *Jim Ackers, Head of Training, IIEP-UNESCO, 21 December 2018, Teacher education and inclusive education, UNESCO, International Institute for Educational Planning, <http://www.iiep.unesco.org/en/teacher-education-and-inclusive-education-4789>*
- ❖ Lani Florian, The Universal Value of Teacher Education for Inclusive Education, JSTOR, [https://www.jstor.org/stable/j.ctv1f70kvj.8?seq=1#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/j.ctv1f70kvj.8?seq=1#metadata_info_tab_contents)
- ❖ Leicht, Alexander, Heiss, Julia, Won Jung Byun, 2018, Issues and trends in education for sustainable development, UNESCO Digital Library, <https://unesdoc.unesco.org/ark:/48223/pf0000261445>
- ❖ Marta Medina-García 1 , Luis Doña-Toledo 2,\* and Lina Higuera-Rodríguez 1, 5 June 2020, Equal Opportunities in an Inclusive and Sustainable Education System: An Explanatory Model, MDPI, file:///C:/Users/priti/Downloads/sustainability-12-04626-v2%20(5).pdf
- ❖ William Nketsia, Maxwell Peprah Opoku, Timo Saloviita, Danielle Tracey, 22/JANUARY/2020 Teacher Educators' and Teacher Trainees' Perspective on Teacher Training for Sustainable Development, ResearchGate, [https://www.researchgate.net/publication/343097247\\_Teacher\\_Educators'\\_and\\_Teacher\\_Tra\\_inees'\\_Perspective\\_on\\_T\\_eacher\\_Training\\_for\\_Sustain\\_able\\_Development](https://www.researchgate.net/publication/343097247_Teacher_Educators'_and_Teacher_Tra_inees'_Perspective_on_T_eacher_Training_for_Sustain_able_Development)



# Contribution of ICT in Enhancing Teacher Education

*Ms. Sapna Rani*  
Lecturer  
Institute of Vocational Studies  
Delhi

---

---

## ABSTRACT

*Information and communication technologies (ICTs) are "technological tools and resources that are to communicate, and create, disseminate, store, and manage information." C. Blurton . In this article we have discussed Purposes of using ICT in Teacher Education, what are the factors ICTs in Teacher Education and strategies against them. ICTs can support effective professional development of teachers. Using ICTs as tools for training of teachers is as important as introducing the basics of ICTs to the prospective teachers. As sources of information and expertise as well as tools for distance communication, ICTs can offer many new possibilities for teacher education. Teachers may through the regular use of these technologies. Use of new media, new rules of communication- even a new language -have to be learned.*

*There are a variety of approaches to professional development of teachers in the context of use of ICTs in education. Professional development to incorporate ICTs into teaching and learning is an ongoing process and should not be thought of as one 'injection' of training. The most obvious technique for professional development for teachers is to provide course in basic ICTs knowledge and skills. It is necessary for teachers to become skilled in operating the new technologies and in exploiting them effectively as educational tools.*

*Teachers need to update their knowledge and skills as the school curriculum and technologies change. Teachers must master the use of information-skills of research, critical analysis, linking diverse types and sources of information, reformulating retrieved data- if they are to teach their pupils to develop*

these same skills. Teachers must be adequately equipped with more educational competencies so as to assume their new role as experts in the learning process. Two aims of teachers training are fundamental: teacher education in ICTs; and teacher's education through ICTs.

**Keywords:** ICT, Teacher Education

## INTRODUCTION

*"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

ICTs stand for information and communication technologies and are defined, for the purposes, as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information." These technologies include computers, the Internet, broad casting technologies (radio and television), and telephony.

Information and communication technology (ICT) has become an integral part of today's teaching-learning process. Countries across the world are using ICT in facilitating information dissemination and communication in all areas of education and training. Besides ICT is being used in distance learning. It is enabling online designing of courses, online delivery of courses, computer aided teaching, online assessment, besides management and networking of a large number of educational institutions. ICT- based systems, CD based courses, online courses and digital libraries, discussion forums, digital portfolios, teleconferencing, etc. have made e-learning a reality today.

ICT can actually assist with some of these expectations and make teachers and their students more successful. Using ICT to enhance our Teacher Education teaching may allow us to conduct novel activities that would be impossible without it. Effective use of ICT can motivate students, make our classes more dynamic and interesting, and renew teacher's enthusiasm as they learn new skills and techniques, Computers, video, audio and other ICTs can all bring the outside world into our Teacher Education making them appear more realistic and helping students to understand any abstract concept clearly.

## WHY TO USE ICT

1. To prepare the current generation of students for the workplace where ICTs are becoming more and more ubiquitous.
2. To support teacher development, e.g. through external works.
3. To train students in skills which they will further need in further education and ongoing learning throughout the rest of their lives and for their future jobs.
4. To provide access to information and communication outside the Teacher Educations, e.g. video conferencing with students in other countries, using the internet, etc.

5. To support and potentially transform the learning/teaching process in many and diverse ways.

## **EXAMPLES OF ICT-BASED ACTIVITIES**

What kinds of Teacher Education activities are suited to the use of ICT? The following is a brief guide to some of the most common uses of ICT in teaching and learning.

### ➤ **Finding out**

Students can use ICT to find out information and to gain new knowledge in several ways. They may find information on the Internet or by using an ICT-based encyclopedia such as Microsoft Encarta. They may find information by extracting it from a document prepared by the teacher and made available to them via ICT, such as document created using Microsoft Word or a Microsoft PowerPoint slideshow. They may find out information by communicating with people elsewhere using email, such as students in a different school or even in a different country.

### ➤ **Processing knowledge**

Students can use ICT as part of a creative process where they have to consider more carefully the information which they have about a given subject. They may need to carry out calculations (e.g. by using Microsoft Excel), or to check grammar and spelling in a piece of writing (perhaps using Microsoft Word), or they may need to re-sequence a series of events (for example by re-ordering a series of Microsoft PowerPoint slides).

### ➤ **Sharing knowledge**

Students can use ICT to present their work in a highly professional format. They can create documents and slideshows to demonstrate what they have learned, and then share this with other students, with their teacher, and even via email with people all around the world.

### ➤ **Computers and the Internet use for teaching and learning**

There are three general approaches to the instructional use of computers and the Internet, namely:

- 1) Learning about computers and the Internet, in which technological literacy is the end goal;
- 2) Learning with computers and the Internet, in which the technology facilitates learning across the curriculum; and
- 3) Learning through computers and the Internet, integrating technological skills development with curriculum applications.

➤ **Learn about computers and the Internet**

Learning about computers and the Internet focuses on developing technological literacy. It typically includes:

- Fundamentals: basic terms, concepts and operations
- Use of the keyboard and mouse
- Use of productivity tools such as word processing, spreadsheets, and data base and graphics programs
- Use of research and collaboration tools such as search engines and email
- Basic skills in using programming and authoring applications such as Logo or Hyper Studio
- Developing an awareness of the social impact of technological change.

➤ **Learning with computers and the Internet**

Learning with the technology means focusing on how the technology can be the means to learning ends across the curriculum. It includes:

- Presentation, demonstration, and the manipulation of data using productivity tools
- Use of curriculum-specific applications types such as educational games, drill and practice, simulations, tutorials, virtual laboratories, visualizations and graphical representations of abstract concepts, musical composition, and expert systems
- Use of information and resources on CD-ROM or online such as encyclopedia, interactive maps and atlases, electronic journals and other references.

Technological literacy is required for learning with technologies to be possible, implying a two-step process in which students learn about the technologies before they can actually use them to learn.

➤ **Learning through computers and the Internet mean**

Learning through computers and the Internet combines learning about them with learning with them. It involves learning the technological skills “just-in-time” or when the learner needs to learn them as he or she engages in a curriculum-related activity.

## **BENEGITS OF USING ICT IN TEACHER EDUCATION**

Here are some of the benefits which ICT brings to education



**General benefits**

1. Greater efficiency throughout the school.
2. Communication channels are increased through email, discussion groups and chat rooms
3. Regular use of ICT across different curriculum subjects can have a beneficial motivational influence on students' learning.

**Benefits for teachers**

1. ICT facilitates sharing of resources, expertise and advice
2. Greater flexibility in when and where tasks are carried out
3. Gains in ICT literacy skills, confidence and enthusiasm.
4. Easier planning and preparation of lessons and designing materials
5. Access to up-to-date pupil and school data, any time and anywhere.
6. Enhancement of professional image projected to colleagues.
7. Students are generally more 'on task' and express more positive feelings when they use computers than when they are given other tasks to do.
8. Computer use during lessons motivated students to continue using learning outside school hours.

**Benefits for students**

1. Higher quality lessons through greater collaboration between teachers in planning and preparing resources.
2. More focused teaching, tailored to students' strengths and weaknesses, through better analysis of attainment data.
3. Improved pastoral care and behavior management through better tracking of students.
4. Gains in understanding and analytical skills, including improvements in reading comprehension.
5. Development of writing skills (including spelling, grammar, punctuation, editing and re-drafting), also fluency, originality and elaboration.
6. Encouragement of independent and active learning, and self-responsibility for learning.
7. Flexibility of 'anytime, anywhere' access (Jacobsen and Kremer, 2000).
8. Development of higher level learning styles.

9. Students, who used educational technology in school felt more successful in school, were more motivated to learn and have increased self-confidence and self-esteem.
10. Students found learning in a technology-enhanced setting more stimulating and student-centered than in a traditional Teacher Education.
11. Broadband technology supports the reliable and uninterrupted downloading of web-hosted educational multimedia resources.
12. Opportunities to address their work to an external audience.
13. Opportunities to collaborate on assignments with people outside or inside school.

## **ICT AND RAISING STANDARDS**

Recent research also points to ICT as a significant contributory factor in the raising standards of achievement in schools.

- ♦ Schools judged by the school inspectors to have very good ICT resources achieved better results than schools with poor ICT.
- ♦ Schools that made good use of ICT within a subject tended to have better achievement in that subject than other schools.
- ♦ Socio-economic circumstances and prior performance of pupils were not found to be critical.
- ♦ Secondary schools with very good ICT resources achieved, on average, better results in English, Mathematics and Science than those with poor ICT resources.
- ♦ A range of research indicates the potential of ICT to support improvements in aspects of literacy, numeracy and science.
- ♦ Improved writing skills: grammar, presentation, spelling, word recognition and volume of work.
- ♦ Age-gains in mental calculations and enhanced number skills, for example the use of decimals.
- ♦ Better data handling skills and increased ability to read, interpret and sketch graphs  
Improvements in conceptual understanding of Mathematics (particularly problem solving) and Science (particularly through use of simulations)

## **VARIOUS ICT TOOLS AND QUALITY IMPROVEMENT IN TEACHER EDUCATION**

ICTs can enhance the quality of education in several ways: by increasing learner motivation and engagement by facilitating the acquisition of basic skills, and by enhancing teacher training. ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner-centered environment.

- **Motivating to learn.** ICTs such as videos, television and multimedia computer software that combine text, sound, and colorful, moving images can be used to provide challenging and authentic content that will engage the student in the learning process. Interactive radio likewise makes use of sound effects, songs, dramatizations, comic skits, and other performance conventions to compel the students to listen and become involved in the lessons being delivered. More so than any other type of ICT, networked computers with Internet connectivity can increase learner motivation as it combines the media richness and interactivity of other ICTs with the opportunity to connect with real people and to participate in real world events.
- **Facilitating the acquisition of basic skills.** The transmission of basic skills and concepts that are the foundation of higher order thinking skills and creativity can be facilitated by ICTs through drill and practice. Educational television programs such as Sesame Street use repetition and reinforcement to teach the alphabet, numbers, colors, shapes and other basic concepts. Most of the early uses of computers were for computer-based learning (also called computer-assisted instruction) that focused on mastery of skills and content through repetition and reinforcement.
- **Enhancing teacher training.** ICTs have also been used to improve access to and the quality of teacher training. For example, At Indira Gandhi National Open University, satellite-based one-way video- and two-way audio-conferencing was held in 1996, supplemented by print-materials and recorded video, to train 910 primary school teachers and facilitators from 20 district training institutes in Karnataka State. The teachers interacted with remote lecturers by telephone and fax

## CONCLUSION

So we can conclude that ICTs if used in Teacher Education then they will be very much beneficial for both teaching- learning and for students to be competent in continuously changing world. There are a number of barriers in use of ICT in Teacher Education- They may be related to Teacher or school, further they may be related to Resources, Knowledge and skills, Attitudes and beliefs, Assessment, Subject and Culture But there are different strategies against them By which we can apply them effectively in the Teacher Education.

## REFERENCES

- ❖ Bingimlas, K. A. (2009), Barriers to the Successful Integration of ICT in Teaching and Learning Environments: A Review of the Literature. *Eurasia Journal of Mathematics, Science and Technology Education*,5(3), 235-245.
- ❖ Demiraslan, Y., Usluel, Y. K. (2006). Analyzing the Integration of Information and Communication Technologies into Teaching-Learning Process According to Activity Theory. *Eurasian Journal of Educational Research*, 23:38-49..

- ❖ Hartley, J. (2007), Teaching, Learning and New Technology: a review for teachers. *British Journal of Educational Technology*. Vol 38 No:1 2007 42-62
- ❖ Herzig, R. G. M. (2004). Technology and Its Impact in The Teacher Education. *Computers and Education*, 42(2),111-131.
- ❖ Lawless, K. A. and Pellegrino, J. W. (2007). Professional Development in Integrating Technology Into Teaching and Learning: Knowns, Unknowns, and Ways to Pursue Better Questions and Answers. *Review of Educational Research*. December 2007, Vol. 77, No. 4, pp. 575–614
- ❖ Mishra, P. and Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A New Framework for Teacher Knowledge. *Teachers College Record*.



# NEP-2020: Transformative Roadmap of Education and Teaching in India

*Ms. Tanya Ahuja*  
*Pupil Teacher,*  
*B.Ed. 2nd year,*  
*Institute of Vocational Studies*  
*New Delhi*

---

## ABSTRACT

*Education is an all round drawing of the best in the body, mind and soul and a teacher truly shapes the future of the children- the future of the Nation and the World. A teacher touches the cognitive aspects of a learner's mind as well as the affective aspects that need to be equally nurtured by the act of teaching. A teacher's role is not only limited to the act of teaching or bringing about desirable changes amongst the learners but also understanding the psyche, learning capacity, needs and individual differences of the learners. To inculcate all these competencies, the NEP 2020 played a significant role in teacher education. As mentioned in the NEP 2020 document, "Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development." Hence, the NEP 2020 laid out various aims and objectives to provide a universal access to quality education. Since the teachers are actually the providers of education, they need to help the learners to develop national pride, self-confidence, self-knowledge, cooperation and integration, in order to help the students develop holistically. This article is an analysis of the policies, aims, vision, purpose of teacher education and preparation of noblest teachers under the NEP 2020. The importance, need, pros and cons, impact and implications of teacher education are further talked upon. In order to motivate and get the best out of the teachers, empowerment of teachers is highly emphasized to ensure the best possible future for the children and the nation. The NEP 2020 and it's success is solely dependent upon the belief and efforts of it's fraternity.*

**Keywords:** NEP 2020, Teacher Education, Holistic Development, Reforms, Competencies, Implications of NEP-2020, Empowerment, Multidisciplinary Approach, Integration, ICT, Curriculum Reform, Experiential, Discovery- oriented, Inclusion, Sustainable Education.

## INTRODUCTION

Education is a constantly evolving process, hence the providers of education need to be at par with the upcoming reforms, policies, changes and perhaps, the world. The National Education Policy aims and envisions an education system anchored in Indian culture that directly helps to India's long-term transformation into a just and thriving knowledge society by delivering high-quality education to all, thereby making India a worldwide knowledge powerhouse. This article aims at providing a glimpse of the pattern of teacher education before the implementation of the NEP-2020, the current pattern and what are the various loopholes, advantages and disadvantages of the same.

## OBJECTIVES OF THE ANALYSIS

*The Article is based on the objectives to understand the following aspects of teacher education-*

- ◆ To understand the pattern of teacher education before the implementation of NEP 2020.
- ◆ The role of a teacher to turn the tide or the transformation of the education system for a better tomorrow.
- ◆ The basic attributes, qualities and competencies looked for in a teacher.
- ◆ The implications of NEP 2020 and teacher education.
- ◆ What changes can be made in the area of teacher education.
- ◆ What all reforms and policies have come up in order to empower the teachers and ultimately the students (the future of the Nation).
- ◆ Innovations in teaching approaches and methods.

## ANALYSIS

### TEACHER EDUCATION- IMPORTANCE AND NEED

The Kothari Commission, 1966 said, "Of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant."

Talking about the NEP-2020, teachers are at the heart of fundamental reforms in the education system, according to the National Education Policy 2020. It will aid in the re-establishment of teachers at all levels as the most respected and important members of our society, as they truly shape our next generation of citizens.

Teaching is considered both a science and an art and talking about the need and importance of teacher education, we can say.

- ♦ As the providers of education, the teachers play an important role in imparting knowledge to the future of the Nation. And to provide knowledge, they themselves need to be well versed in various specialized and certain common areas. Teacher education programmes assist teacher candidates in acquiring practical wisdom that integrates forms of understanding, skilled action in and out of the classroom, and a particular sensitivity to student diversity. Teacher candidates are expected to be well-versed in a variety of subjects. Student development, the content areas that are central to their teaching, and assessment strategies are all important considerations.
- ♦ In actual educational settings, teachers are expected to be thoughtful, reflective, and caring practitioners. Experiences in schools and on campus must be maintained or created by teacher education programmes so that instructors can assist candidates in developing and assessing this professional expertise. As a result teacher education programmes include early and ongoing engagement—via direct instruction. Immersion or simulation—with the various realities of children, education, and schools. Candidates for teacher positions are expected to create and promote a healthy physical, social, and academic learning environment.
- ♦ Good teachers capitalize on their students' interests, learning preferences, and hopes. Similarly, teacher education programmes should provide opportunities for teacher candidates to individualize and personalize their preparation as teachers. As a result teacher education programmes give teacher candidates significant control over how, when, and where they learn allowing their interests and values to shape a large portion of their work. Candidates for the position of teacher are expected to recognize students' skill levels, interests, and learning styles. They should provide instruction that reflects the diversity of their students among all students.
- ♦ Effective teacher preparation necessitates the development of a sense of community among participants through participation in shared activities and issues. The long-term relationships required to establish a community have several benefits for all of its members. It gives programmes coherence, fosters an appreciation for the power of collaborative effort, and promotes a dialogue that further promotes that teacher education must be revitalized on a regular basis. As a result teacher education programmes foster a sense of community among their students, candidate teachers, among faculty members, between faculty members and candidates, and between the university and the candidates' schools. Teacher candidates must understand and participate in their academic learning community. They ought to construct and strengthen relationships within the school, corporation, and community.

- ♦ Effective teachers examine the moral, political, social, and economic dimensions of education critically. This necessitates an understanding of the various contexts in which schools operate, an appreciation for differing perspectives on educational issues, and a commitment to democratic forms of interaction. As a result teacher education programmes encourage students to grow their own social and educational visions linked to critically reflective practice. Candidates for the position of teacher are expected to reflect on all aspects of their teaching experience on a regular basis in order to identify areas for improvement as individuals and as members of the teaching team as a member of the school community and as a member of the teaching profession.
- ♦ Teachers are more than just technicians or information providers. As a result, they must be dedicated to lifelong intellectual, personal, and professional development. Because both faculty and teacher candidates must constantly cultivate these habits of mind, teacher education programmes must encourage the exploration and development of the entire range of human capabilities. Thus, through sustained analysis, teacher education programmes foster intellectual curiosity and an appreciation for learning, ideas, values, and practices, as well as intuition, imagination, and aesthetic experience. Candidates for the position of teacher are expected to create a teaching and learning philosophy. This philosophy, as well as continuous professional development, should values, commitments, as well as professional development.

## REFORMS AND POLICIES UNDER NEP-2020 (TEACHER EDUCATION)

The policy reflects the five 'I's – Indian, Internationalism, Impactful, Interactive, and Inclusive – while focusing on equity, quality, and access.

- ♦ **Early Childhood Care and Education:** The NEP 2020 highlights the importance of the early years in ensuring quality early childhood care and education for all children aged 3-6 years by 2025. The current system of Anganwadis and pre-schools will cater to children aged 3 to 5, while children aged 5 to 6 will be seamlessly integrated into the schooling system.
- ♦ **New Curricular and Pedagogical Structure:** With an emphasis on Early Childhood Care and Education, the 10+2 school curriculum structure will be replaced by a 5+3+3+4 curricular structure corresponding to ages 3-8, 8-11, 11-14, and 14-18 years, respectively.
- ♦ **Holistic Multidisciplinary Education:** At the undergraduate level, the policy envisions a broad-based multi-disciplinary holistic education. The undergraduate degree will be three or four years in length, with multiple exit options and appropriate certifications available within that time frame.



- ♦ An Academic Bank of Credit (ABC): ABC will be established to digitally store academic credits earned from various recognised Higher Education Institutes (HEIs) so that degrees from a HEI can be awarded taking credits earned into account.
- ♦ The New Education policy emphasises the importance of teacher education, citing Acharya Devo Bhava's legacy. Teacher education is critical in developing a pool of educators who will shape the next generation. Teachers will be equipped with the skills of reforming, transforming, and performing all at the same time. To meet the needs of the twenty-first century, teacher preparation will necessitate not only multidisciplinary perspectives and knowledge, but also the formation of dispositions and values and the development of practices under the best mentors. As a result, an overhaul of teacher education is required; in accordance with this, a 4-year integrated stage-specific, subject-specific Bachelor of Education will be offered at multidisciplinary institutions.
- ♦ The NCTE, in collaboration with NCERT, will develop a new and comprehensive National Curriculum Framework for Teacher Education, NCFTE 2021. By 2030, the minimum degree qualification for teaching will be a four-year integrated B.Ed. degree that teaches a variety of knowledge content and pedagogy and includes extensive practicum training in the form of student-teaching in local schools. Substandard stand-alone Teacher Education Institutions will face severe consequences (TEIs). These measures will assist us in developing the best teachers possible and emerging as global leaders.

## **DESIRED ATTRIBUTES AND QUALITIES OF TEACHERS UNDER THE POLICY**

Education is the process of acquiring knowledge, skills, values, morals, and beliefs in order to reach one's full human potential. It is regarded as the single most powerful tool for social and individual development, leading to the achievement of social justice and equity in society. Though we learn a variety of things in our daily lives, formal education, which is the preferred tool for human resource development, refers to the academic institution where teachers teach or demonstrate defined curriculums. This formal education is conceived of as a tri-polar process with goals, curriculum, and evaluation that leads to the conversion of a child into a human resource. This formal education has four verticals: infrastructure, students, teachers, and curricula, with the third vertical, teachers, playing a critical role in making the formal education successful. With the importance of teachers in the education system in mind, the NEP-2020 has highlighted the role of teachers as well as the desired attributes of teachers for nation-building. Teachers have been placed at the center of the most critical fundamental reforms in the education system under this policy. The policy has also emphasized the importance of re-establishing teachers at all levels as the most respected and important members of our society, as they shape the country's future generation. As a step forward, the NEP-2020 has also elaborated on the transparent recruitment of good teachers

in order to give autonomy while instilling a sense of responsibility and accountability in every teacher.

We must recognize that a teacher's role is not limited to teaching in a four-wall classroom, but also includes developing course curriculum, producing quality books and study materials, innovation in teaching-learning methods, assessing students, mentoring students, and so on. As a result, the NEP 2020 has reaffirmed the restoration of high respect and status for teachers in society through empowerment. As a result, a capacity-building action plan has been developed to ensure that man-making becomes flawless.

Simultaneously, the NEP has elaborated on the required attributes for teachers to be good teachers in order to achieve the NEP's objectives and make it fruitful. Now comes the question of who is a good or ideal teacher. What are the desired characteristics of an ideal teacher? Who will judge or assess a teacher's acquiring characteristics in order to consider him or her to be an ideal teacher? Can we identify some characteristics that every teacher should possess? There may be several such questions about the characteristics of a good or ideal teacher, but they may be difficult to answer or narrow down.

Some of the attributes are-

1. Punctuality.
2. Adhering to professional ethics.
3. Passion for lifelong learning.
4. Effective communication.
5. Good listener.
6. Empathy.
7. Working by collaborating.
8. Must be able to use multidisciplinary or integrated approach towards teaching.
9. Adaptive, responsive and innovative.
10. Emphasizing on experiential learning.

## **HOLISTIC, MULTIDISCIPLINARY, EXPERIENTIAL, DISCOVERY- ORIENTED APPROACH TOWARDS TEACHING**

The National Education Policy (NEP) 2020 emphasizes that experiential learning, including hands-on learning, arts-integrated and sports-integrated education, and story-telling-based pedagogy, among others, will be adopted as standard pedagogy within each subject, as well as explorations of relationships among different subjects, at all stages. Today, experiential learning is an essential method in all innovative pedagogical practices because it seeks to shift the child from rote learning and memorization to learning by doing through experience and activity. This is especially important in light of the demands of the present and future, as a result of the technological revolution's sweeping changes.

To keep up with these changes, education must emphasize experimental, expeditious, and experiential learning rather than relying solely on traditional methods of knowledge gathering and transmission. To meet the changing demands of the world, education from the foundational years should provide knowledge, understanding, and skills to help children develop qualities such as creativity, critical thinking, communication, leadership, decision making, self-regulation, and problem solving. In this context, the NEP's emphasis on moving toward an experiential learning methodology in schools is a positive step in the right direction.

Experiential learning focuses on the practical application of knowledge and skills to real-world situations in order to increase learner knowledge and develop competence in skills and behaviors. It is widely used for educational learning, personal development, and skill building in schools, higher education, therapy, corporate training, and other settings. The term experiential learning refers to individual participation based on their own experiences and sharing. It is the process of learning through experience, more precisely 'learning through reflection on doing.' Its goal is for a learner to gain better skills, knowledge, and a broader perspective.

Learning only has a positive impact when students are eager to learn. As a result, experiential learning necessitated the presentation of instructions to learners. Experiential learning is a hands-on approach to learning that shifts away from the teacher standing in front of the class imparting and transferring their knowledge to students. It strives to bring a more involved way of learning by making learning an experience that extends beyond the classroom. Experiential learning focuses on the individual's learning process. A common example for this can be: when students are learning about different monuments, taking the students to an educational tour would benefit and help them learn more effectively as compared to reading about the monuments in a textbook. Their own experience would help them learn better instead of learning from other's experiences. While encompassing both scholastic and co-scholastic areas, NEP 2020 states that, as part of the emphasis on experiential learning, art-integrated education will be embedded in classroom transactions not only to create joyful classrooms, but also to imbibe the Indian ethos through integration of Indian art and culture in the teaching and learning process at all levels. This art-infused approach will strengthen the connections between education and culture. This reformative measure emphasizes the shift from the traditional 'chalk-and-talk' method to the innovative 'learning by doing through reflection.' It is argued that this reform is required to create a competency-based education system by developing the three aspects of knowledge, skill, and abilities. To achieve such a goal, much work must be done to develop strategies and programmes for transforming teachers from 'dispensers of knowledge' to 'felicitors of learning.' In this context, the NEP recommends major reforms in which teacher training and education are critical in creating a pool of schoolteachers who will shape the next generation. These recommendations are thought-provoking and far-sighted, and they are critical components of developing a holistic and skill-based education for the twenty-first century.

## ADVANTAGES AND DISADVANTAGES OF THE MAJOR REFORMS AND IMPLICATIONS OF NEP-2020

### Advantages

- ◆ **More Education Sector Spending:** Currently, the education sector in India receives only a 3% share of GDP; however, with the implementation of NEP 2020, spending will increase to nearly 6%, giving the education sector a new lease on life.
- ◆ **Focus on Critical Thinking:** The board exam system, which primarily tested students' memorization and rote learning ability, will be replaced with a focus on developing students' critical thinking, rationalization, and creativity through practical application of their knowledge.
- ◆ **Making Education a Basic Right:** At the moment, the government ensures that children aged 6 to 14 years receive compulsory education, for which numerous programmes, including the "Sarva Shiksha Abhiyan," have been successfully implemented. However, it excluded several children from the educational system. As a result, the updated NEP promises to universalize education, including children aged three to eighteen, and to provide them with free education in government-run institutions.
- ◆ **Improvement in Teaching Quality:** By 2030, B.Ed. will be made a mandatory four-year course to improve the quality of education for teachers, and steps will be taken to prepare them to deal with various issues in the education system, such as providing support and mentorship to students and being trained to teach students with disabilities.

### Disadvantages

- ◆ **Focus on Digital Learning:** While it appears to be practical and necessary, the NEP 2020's emphasis on digitization of education and promotion of e-learning appears to overlook the fact that only about 30% of Indians can afford smartphones and even fewer have access to computers. Then, because government-run schools lack a strong IT infrastructure, students in remote areas or from low-income families will be unable to adapt to IT-based learning until such a facility is made available as soon as possible.
- ◆ **Language enforcement:** The NEP emphasizes the introduction of mother tongue in primary classes, which will be used to teach the main subjects, while English will be taught much later. Unlike other countries with a single mother tongue, such as Germany, Russia, Japan, China, and France, India is a diverse country with 22 major languages and thousands of dialects. As a result, translating the fundamental subjects into these various regional languages (and mother tongues) will be a monumental task that will necessitate a significant amount of time, effort, and skilled professionals. Another factor that has prompted some people to speak out against the NEP is that the enforcement of mother tongue and regional languages is viewed as a move by the central government.

## CONCLUSION

For education to be powerful, the spirit of 'Acharya Devo Bhava' must be fostered, and teachers must first be empowered. This thought aided in enhancing the role of the teacher in order to incorporate the 'vision of the teacher' for the twenty-first century. Sadly, until recently, the role of the teacher was limited to clerical tasks and the administration of the curriculum, as well as the administration of prescribed examinations. Through the NEP, there will be a clear transition in which transitional classrooms and the teaching-learning process will now emphasize conceptual development rather than transactional learning, experiential learning in real-world contexts, and an enabler for developing essential ethos and values in the digital age. It is hoped that the teachers will educate and empower the country.

## REFERENCES

- ❖ <https://www.google.com/amp/s/www.indiatoday.in/amp/education-today/featurephilia/story/nep-2020-how-teachers-can-shape-students-for-a-new-india-1718671-2020-09-04>
- ❖ <https://www.google.com/amp/s/www.sentinelassam.com/amp/editorial/nep-2020-and-desired-attributes-of-teachers-550398>
- ❖ [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- ❖ [https://www.education.gov.in/sites/upload\\_files/mhrd/files/upload\\_document/nep\\_achievement.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/nep_achievement.pdf)

