ISBN : 978-93-5406-158-5

ARMY INSTITUTE OF EDUCATION

Greater NOIDA

Affiliated to Guru Gobind Singh Indraprastha University, New Delhi
(NAAC Accredited, NCTE & RCI Approved and ISO 9001:2015 Certified Institute)

Teacher Education in India: New Vistas - New Challenges

PROCEEDINGS OF NATIONAL SEMINAR
19 September 2019

Chief Editor
Tania Gupta

Editors
Jyoti Tiwari
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Chief Editor : Tania Gupta

Editors : Jyoti Tiwari, Neeti Sharma

ISBN : 978-93-5406-158-5

Year of Publication : 2020

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Published By: Army Institute of Education Plot M-1, Pocket P-5, Sector CHI, Greater NOIDA Distt- Gautam Buddh Nagar (UP) Pin Code- 201306

E-mail: aiedelhi@gmail.com Tele No: 0120-2343741

Printed at: HQ Delhi Area Printing Press, Delhi Cantt-10, Tele No: 011-25692436

ISBN : 978-93-5406-158-5

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Education 4.0 : A Tool to Empower Educators

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Abstract

Education is a dynamic process. The basic aim of education is to empower the learner to lead a successful life and contribute best for his family, society, nation and ultimately to humanity. Education must help the learner to recognize and actualize his true potential. Unfortunately, our traditional concept has led our teaching-learning process till classroom where learning was limited to textbooks, black board and discussion etc. In 21st century, advancement in technology has amplified various fields like industries, agriculture and education and so on. Now learner's need to boost their skills and abilities to compete with the outside world .Education 4.0 is a "technology-based tools" which complete the phenomena for life-long learning's opportunities and experiences using internet modes, communication tools, smart school management system and learning tools etc, Through education 4.0, educators can appropriately serve their student's according to their needs and can make them independent learner's , which creates interest in classroom learning, and also motivates and prepare learner for both to work and for employment. It helps in empowering both the educators as well as the learners. This paper will focus on the meaning and background of education 4.0, benefits, challenges and role of education 4.0 as a tool to empower educators.

Keywords: *Background of Education 4.0, Education 4.0, Teaching-learning process, Education 4.0 as a Tool.*

Introduction

Education is a dynamic process which keeps on changing with technological advancement. The basic aim of education is to empower the learner to lead a successful life and contribute best for his family, society, nation and ultimately to humanity. Education must help the learner to recognize and actualize his true potential. Unfortunately our traditional concept has led our teaching-learning process till classroom where learning was limited to textbooks, black board and discussion etc. In 21st century, advancement in technology has amplified various fields like industries, agriculture and education and so on. Now learners need to boost their skills and abilities to compete with the outside world. This is the era of smart phones and classrooms, online exams, robotic

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ISBN : 978-93-5406-158-5

house help and workplace companions; what is the common thread running through them all? A rapid advancement in technology, courtesy highly innovative minds; a time in which technology and creativity have become sine quanon in everyday life — Industrial revolution 4.0 or, IR 4.0 has arrived and how.

This is a journey of Education which started from 1.0 and we are at the stage to talk about education 4.0.Education was started with its traditional concept in education1.0, where teaching and learning process exist within classroom. Education 2.0 involved interactions between teacher-student, student-to-student, student-to-content and then education 3.0 came in existence which is based on a flipped classroom .This education evolution has flipped the setting of classroom as well as the role of teacher.

Now these days Education 4.0 complete the phenomena of "technology-based tools" where educators will able to focus to each of the students and able to solve their problems with appropriate tools. Some of the places in world like Bhutan and ASEAN countries like Malaysia Thailand, Philippines and Vietnam etc., has made the blueprint of education 4.0 to match the global trends. UK University conference (UUK) 2018, Jisc introduced the education 4.0 concept.

Meaning of Education 4.0

Education 4.0 is a "technology-based tools "where teaching-learning process takes place in internet modes like video chats, dialing videos calls and massive online open classes etc., which makes the students understand the contents from anywhere at any time. The technological change in education has made the student to be independent as learners, able to grasp the material in the same way as their peers, with the availability of appropriate tools; techniques and the method the educator are able to clear the contents resulting in great student learning outcomes.

Education 4.0 enables teachers to teach the students with personalized learning tools and the methods to trained or show the concept practically with the internet modes which creates the interest of learner in classroom learning and make teaching-learning effective.

Journey of Education 4.0

Education 1.0:- It is a traditional concept, where teachers teach within classroom with the curriculum and textbook, and the students gain it in the same way. Teachers aren't able to focus on each student due the lack of advance technology and the individual differences in the intellect abilities of the students, the students are not able to take the same material as it is imparted in the classroom.

Education 2.0:-. It involves interaction between teacher-student, student-to-student, student-to-content and expert. It established the relationship between teachers and students as a part of learning process where students can ask the questions and teachers

contributing. This system uses the social networking learning experiences are built in class and course structure i.e. traditional concept is going on.

Education 3.0:- This system emphasis on teaching-learning process with the breakdown of boundaries between the teachers and students. Here the students learn accordingly with the social networking and grasp the material as per their understanding levels and even can experience the things practically. Today's student, textbook has no longer had a monopoly on knowledge and content. They use wide range of learning resources as per their needs.

Education 4.0 in ASEAN Countries

ASEAN countries like Malaysia, Thailand and Vietnam has developed a blueprint of this education 4.0 in a higher education system for alignment with global trends bounds with enduring necessary changes and adoptions.

In order to welcome the new drain education 4.0 The Ministry of Higher Education (MoHE) Malaysia has developed Malaysia Education Blueprint 2015-2025 known as MEB. The purposes of accomplishing Malaysian education system in alignment with global trends and highlights the balance between both ethics and skills.

In Philippines education system realized the surged of alignment with global trends through the recent relevant reforms in the system of education which includes K-to-12 and the development of Philippine Qualifications Framework (PQF) but an issue would be there enough preparation and readiness in consideration to the present research development capacity, facilities, and technology which are requirements to claim that the country is ready for education 4.0 or perhaps, it is still in the education 3.0 and in a long way for revolution because of gap in the technology." Technical Education and Skills Development Authority (TESDA) Report,2016.

The Bhutan Education Blueprint 2014-2024, proposes rethinking in education and taking radical steps to respond to the challenges and changing needs of our education system more holistically. It aims to establish the vision and aspirations for Bhutan's education system as a time -bound road map will prepare young Bhutanese for the challenges of 21st century. It also focuses on four educational dimensions are: access, quality, equity and system efficiency.

Some initiatives taken by them are: -

1. To prepare students for globally competitive.
2. To improve access to education, raising quality of education, closing achievement gaps, maximizing system efficiency

Benefits of Education 4.0

Through the review of various studies, it can be said that education 4.0 has many benefits. The main benefits are here categorized under following heads:

1. **Benefits for Student:-** In today's era, students are considered as a primary focus in teaching-learning process, it can successful only when the learning is done according to their level with appropriate tools, technology and methods to make understand as in class various individual differences are there and education 4.0 makes the concept clear with internet modes and face-to-face interaction is possible, with this system students are reinforced during their learning process, makes them competitive and empowers them vocationally.
2. **Teachers:-** This system empowers the educator with the availability of appropriate tools and techniques which helps them to make learning possible according to their level and show the contents practically. It helps to understand the learner's problems, with better communication, reduces the burden in them and serve the students well with specific needs. It is built for teachers to feel empower and be better at their job.
3. **Management and Administration:-** It also benefits the management and administration in the form of less burden on the resources used. The non-education staff can register their records in the new technology i.e., education 4.0 is built around the optimal use of tools and resources driven by technology, which reduce the financial burden and overworked administrative staff. It will enable them to keep records for longer period, can work effectively.

Challenges in implementing Education 4.0 -

- Too many sources of distraction
- New generation of students constantly changing
- Reduced attention span
- What we will learn in during our education won't last for our entire carrier
- Schools are often not very helpful to choosing a carrier path

Basic Requirements of Education 4.0

Education 4.0 will require gradual paradigm shifts:

Demand-led instead of supply-led education

Competency-based instead of knowledge-based

Incorporate disruptive technologies &skill-sets

Lifelong learning instead of front-loaded learning

Modular Degree instead of one-shot going

Emphasis on EQ than IQ alone

Focus on purposefulness, mindfulness leading to overall Happiness & Wellbeing as conclusively established in global research of OECD learning framework2030.

Education 4.0: A Tool to Empower Educators

A Tool is nothing in itself. It is the person who makes it a tool do his work effectively and efficiently. Empowering means overall development of a person. In traditional concept of education, the educator were not so empowered due to the lack of appropriate tools and techniques to be used by them to enhance the teaching learning process, even can't understand intellect abilities of students exactly till where they have to go for learning process.

In this modern concept, due to the advancement in education system, the educator are able to focus on each student's, understand the intellect abilities of students exactly till where they have to go for learning process are possible with the availability of appropriate tools, techniques and methods. Now teachers can present the contents effectively by using this tool and can makes the learning more effective. Educator can also help their students for their overall development through giving more opportunities for creativity and skill development. In other words, Education 4.0 will help the educator as a tool in creating the interest among the learner and ultimately empowers the educators to work effectively and efficiently.

Conclusion

Education 4.0 is aimed at improving the productivity of an employee and outcome of the learner, improving the competitiveness of the educational institutes. It aims to improve the productive and competitive capacity of the country as a whole. Such a system where creativity and innovativeness of the human brain are improved will make educated students more prepared for an uncertain and volatile future. Thus, with Education 4.0 the educator can create better students and can get better outcome of teaching- learning.

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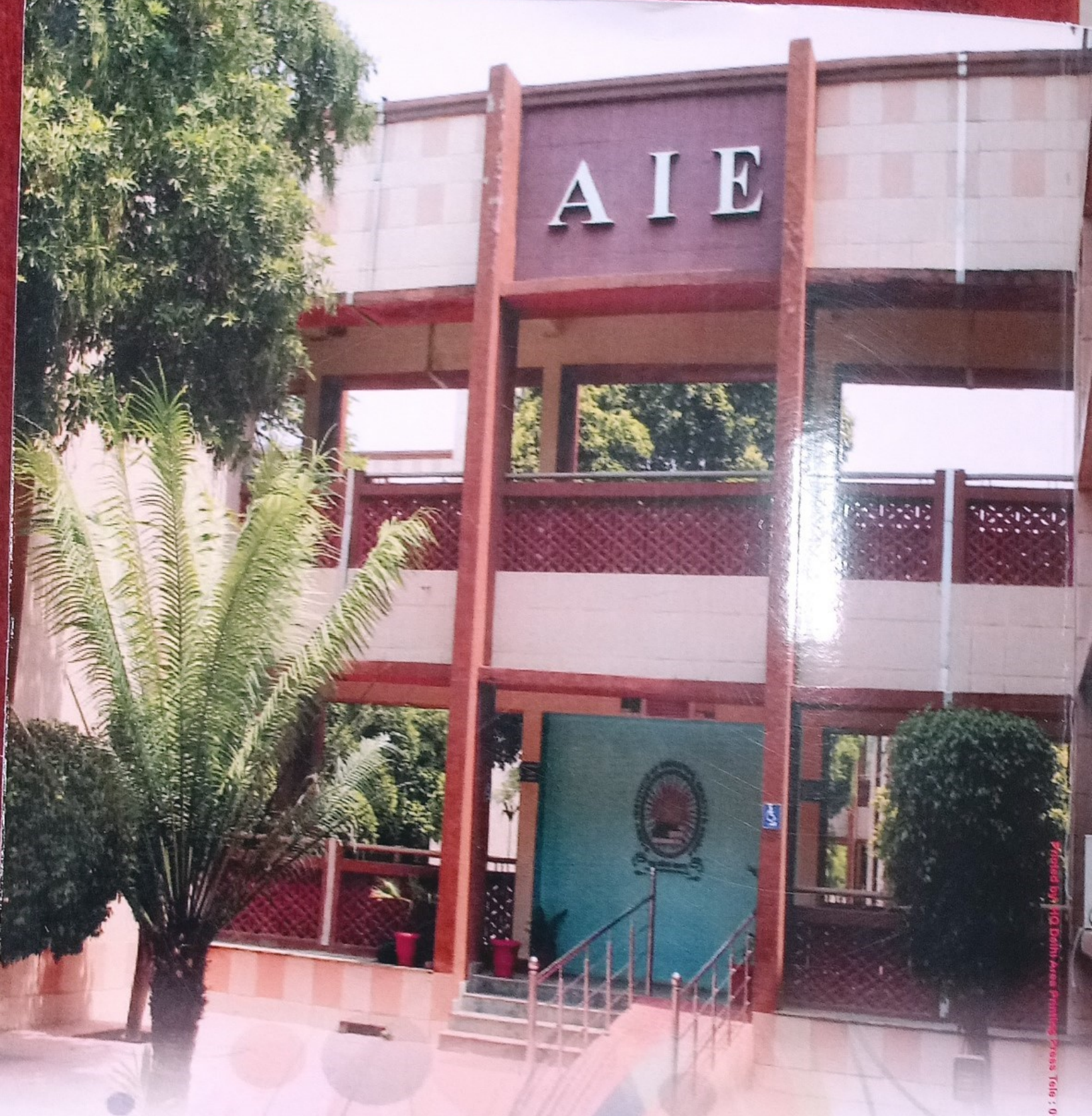

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Plot M-1, Pocket P-5, Sector CHI-2, Greater NOIDA-201306, Ph: 0120-2343741
Email: aiedelhi@gmail.com Website: www.aie.ac.in
Graded 'A' by GGSIP University, New Delhi

Printed by HQ Delhi Area Printing Press Tele : 011-25692436, 8448433300, ASCON 38084