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Editor's Desk

Dear Readers,

Season's Greetings!

It's our proud privilege to present you the volume2, issue 1 of the Journal, JIMS JOURNAL OF EDUCATION, a bi- annual publication of JIMS INSTITUTE OF EDUCATION, JEMTEC Greater Noida.

We are happy to inform you that the first two issues have been well received by the readers and the researchers within the country.

This issue of the Journal presents nine research articles/papers. We are indeed very delighted to introduce this issue of the Journal, like the previous two issues with an article entitled "Appraisal of the Persons with Disability- Act1995—Research Abstract written by Dr. Manisha Minocha, a number of positive provisions and measures and drawbacks of the Act has been summarized .The second paper of the issue entitled ''Online Teaching and Learning: Advantages and Challenges," by Dr. Tandra Sharma describes how online teaching and learning provides a mechanism to incorporate constructivist, experiential, and student-centre learning practices. The paper concludes with the view that online teaching and learning is highly effective and rewarding teaching learning practice in tune with the capabilities, skills and spirit of the twenty first century when designed properly and executed. The third paper of the issue entitled "Current Scenario of Teacher Training Education Policy in India" by Dr. Sanjeev Kumar focuses on Teacher Education in Independent India to the current status and critically examines the current scenario of Teacher Education. The next paper of the issue entitled "Impact of Brain-Friendly Teaching Strategies on Professional Development of Teachers" by Ms. Himani Gajwani tries to determine whether the application of Brain-Friendly Teaching Strategies and environment affect Professional Development of Teachers. The paper entitled "Role of ICT in Open and Distance Learning in Imparting Education" by Mr. Sanjay Bhardwaj emphasizes the role of information and communication technologies (ICT) in open and distance learning .The sixth paper on "Pedagogical Perspective and Inclusive Education in Schools" by Dr. Rajnee Gaur emphasizes on use of pedagogical approaches in inclusive education at school level. The next paper by Dr.Charu Sethi highlights the issues of right to education in "Right to Education Act, 2009: Ensuring Education for All". The second last paper by Dr. Abhilasha

Gautam entitled "ICT for Inclusive Education: the role of some Assistive Technologies", reflects upon the need and significance of emergence and issues related to the Inclusion of Information and Communication Technology in the Present scenario. The last paper in this issue entitled, "Technological Pedagogical and Content Knowledge (TPACK): An Innovative Pedagogical Practice in Teaching and Learning Process," highlights the pedagogical shift required to integrate technology, pedagogy, content and knowledge (TPACK) to maximize learning.

We sincerely acknowledge the encouragement received from the authorities, and faculty members of the JIMS campus. We also acknowledge the authors of the academic papers of this issue for their invaluable contribution to the Journal.

In an attempt to make this Journal a true platform of research and research communications, we would like to invite you to make your valuable contributions in the form of research articles, research papers and brief research communications. We would also encourage the readers to subscribe this journal either individually or through their respective institution's library. The details are also available in the front pages.

On the behalf of our editorial team, we assure you that we will take this journal to new heights and sooner we will go for UGC listing. All these things are not possible without the contribution of authors, so I encourage all of you to submit high standard articles and research papers in this journal.

We are looking forward to get continuous support and good suggestions for the improvement of this journal.

Thanking you, have an enjoyable, insightful reading!

Dr. Tandra Sharma

Editor, JJE.

As a reflective academician, scholar and reflective practicener in the field of education, one must have felt a need of a platform to share their ideas. Yes it is the Journal where research papers, articles, action research, case studies etc can be shared.

JIMS JOURNAL OF EDUCATION (JJE) is a peer reviewed annually published Journal under the patronage of reputed educational group JIMS. The Journal has tried to cover important aspects of education and its related areas. JJE explores all the perspectives of disciplinary and interdisciplinary knowledge. The Journal has focussed towards theoretical as well as practical implication of education.

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Appraisal of the Persons with Disability - Act 1995

Research Abstract

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The Persons with Disabilities PDA Act, 1995, was passed by the Parliament of India on December 12th, 1995, and came into effect on February 7th, 1996.The Act was a landmark because it stated, for the first time that people with disabilities had the right to equal opportunities and full participation and that these rights would be protected by the law. The Act gives details regarding the duties of the government at the various levels and also of the other establishments under their control.

It is a relatively new concept to treat disability as requiring civil rights protection. Until the twentieth century, disability was merely thought to be an issue for assistance through social security. 'Substantive equality' concept emphasizes the dignity, autonomy and worth of the individual and covers equality of opportunity, results and social inclusion. The Act provides for both the preventive and promotional aspects of rehabilitation like education, employment and vocational training, reservation, research and manpower development, creation of barrier free environment, rehabilitation of persons with disability, unemployment allowance for the disabled, special insurance scheme for the disabled employees and establishment of homes for persons with severe disability.

The Rights of Persons with Disabilities, RPWD Act, 2016 replaces the PDA, 1995 Act. It fulfils the obligations to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The Act was enforced in December 2016. The RPWD, 2016 Act is also known as Divyangjan Adhikaar Kanoon in Hindi.

INTRODUCTION

There are over a billion people with physical and mental disabilities in the world who must overcome challenges every day. One of these challenges is the encounter with other people. Millions of people with disabilities are likely to spend a lifetime of unemployment

and dependency. Unfortunately, there are preconceptions in society regarding disabilities. Sometimes there is avoidance, fear or discomfort surrounding the Differently Abled.

The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995, was passed by the Parliament of India on December 12th, 1995, and came into effect on February 7th, 1996.The Act was a landmark because it stated, for the first time that people with disabilities had the right to equal opportunities and full participation and that these rights would be protected by the law. The Act extends to the whole of India except the state of Jammu and Kashmir. Disability includes, according to the Act, 7 categories --Blindness, Low vision, Hearing impairment, Loco motor disabilities, Leprosy cured, Mental illness and Mental retardation

It is a relatively new concept to treat disability as requiring civil rights protection. Until the twentieth century, disability was merely thought to be an issue for assistance through social security. 'Substantive equality' concept emphasizes the dignity, autonomy and worth of the individual and covers equality of opportunity, results and social inclusion. It has been a harsh reality that substantive equality has not been ensured for disabled people in the past in India.

The PDA Act defines a person with disability as a person who has at least 40 per cent of any of the above impairments, "person with disability means a person suffering from not less than forty percent of any disability, as certified by a medical authority." Rehabilitation has been given as meaning "a process aimed at enabling persons with disabilities to reach and maintain their optimal physical, sensory, intellectual, psychiatric or social functional levels." In the Act provisions are made for a Central Co-ordination Committee.

A CRITICAL APPRAISAL OF THE PDA ACT 1995

The PDA Act, 1995 contains a number of positive provisions and measures that are summarized below.

1. PREVENTION AND EARLY DETECTION OF DISABILITIES

The PDA Act is targeted at early detection of the disability or abnormality and hence there should be eradication of all impairments. This reduces the exclusive focus on medical intervention to address the effects of impairment. The steps suggested in the Act for the

early detection of disabilities, so that they can be prevented as far as it is possible are given below.

a) Surveys, investigations and research shall be conducted to ascertain the cause of occurrence of disabilities.

b) Various measures shall be taken to prevent disabilities. For this purpose the staff at the primary health centre shall be trained.

c) All children shall be screened once a year to identify cases that are at risk.

d) To disseminate information regarding general hygiene, health and sanitation, awareness campaigns shall be launched.

e) Measures for pre-natal, peri-natal and post-natal care of the mother and child shall be taken.

f) Education of public through the pre-schools, primary health centers, village level workers and anganwadi workers.

g) Creation of awareness among the masses through television, radio and other mass media on the causes of disabilities and the preventive measures to be adopted.

2. EDUCATION

For the field of education, the following excellent measures are suggested-

a) Appropriate Government shall ensure that every child with a disability has access to free education in an appropriate environment till 18 years. Endeavour also to promote the integration of students with disabilities in the normal schools.

b) Promote setting up of special schools in Government and private sector for those in need of special education.

c) Appropriate transportation, removal of architectural barriers from schools, colleges or other institutions imparting vocational and professional training.

d) Grant of scholarships and suitable modifications in the examination system to eliminate purely mathematical questions for the benefit of blind students and students with low vision. Restructuring of Curriculum shall be ensured for the benefit of children with

disabilities. Restructuring of curriculum for students with hearing impairment to facilitate them to take only one language as part of their curriculum.

e) Children with disabilities shall be provided free of cost special books uniforms and equipment needed for his education.

Special schools for children with disabilities shall be equipped with vocational training facilities.

f) Non-formal education shall be promoted for children with disabilities. This includes part time classes for those who could not continue studies after class v. Education shall be imparted through open schools and open universities.

g) Teacher training institutes shall be established to develop requisite manpower.

h) Parents may move to an appropriate forum for the redressal of grievances regarding the placement of their children with disabilities.

3. EMPLOYMENT

3% of Vacancies in government employment shall be reserved for people with disabilities, 1% each for the persons suffering from- Blindness or low vision; hearing impairment; loco motor disabilities and cerebral palsy.

Schemes may be provided for -- a) The training and welfare of persons with disabilities. b) The relaxation of the upper age limit. c) Regulating the employment d) Health and safety measures and creation of a non-handicapping environment.

All Government educational institutions and other educational institutions receiving aid from the Government shall reserve not less than 3% seats for persons with disabilities.3% seats at least shall be reserved for persons with disability in all poverty alleviation schemes for the benefit of persons with disabilities.

4. NON-DISCRIMINATION

To promote non-discrimination for persons with disability, various measures are suggested as-

i) There shall be non-discrimination in transport. The transport sector shall take special measures to adapt rail compartments, buses, vessels and aircrafts to permit easy access.

ii) Toilets in above be adapted to permit the wheel chair users to use them conveniently.

iii) Provision of auditory signals at red lights in public roads for the visually handicapped; curb cuts and slopes in pavements for wheel chairs; engravings on surface of zebra crossings for the low vision or blind.; engravings on edges of railway platforms; warning signals at appropriate places.

iv) Provision of ramps in public buildings, hospitals, medical care and rehabilitation units; adaptation of toilets for wheel chair users; Braille symbols and auditory signals in elevators or lifts.

v) No establishment shall dispense with or reduce in rank, an employee who acquires a disability during his service.

vi) No promotion shall be denied to a person on the grounds of his disability.

5. RESEARCH AND MANPOWER DEVELOPMENT

Research in the following areas shall be sponsored and promoted

a) Prevention of disability

b) Rehabilitation

c) Development of assistive devices.

d) Job identification

e) On site modifications of offices and factories.

Financial assistance shall be made available to the universities, other institutions of higher learning, professional bodies and non-government research units or institutions for undertaking research for special education, rehabilitation and manpower development.

6. RECOGNITION OF INSTITUTIONS FOR PERSONS WITHDISABILITIES

No person is to establish or maintain an institution for persons with disabilities except in accordance with a certificate of registration. Provisions are also given in this section on revocation of certificate and appeal. The order of the state government on the appeals shall be final.

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7. INSTITUTIONS FOR PERSONS WITH SEVERE DISABILITIES

Person with severe disability means a person with eighty percent or more of one or more disabilities. Every institution established and maintained for persons with severe disabilities, shall be maintained in such a manner and satisfy such conditions as may be prescribed by the appropriate Government.

8. APPOINTMENT OFTHE CHIEF COMMISSIONER AND COMMISSIONERS FORPERSONS WITH DISABILITIES

Provisions are made regarding the appointment of chief commissioner for persons with disabilities; Functions include to look into complaints with respect to deprivation of persons with disabilities, appointment of Commissioners for persons with disabilities. Powers are also stated.

9. COMPREHENSIVENESS: The Act provides for both the preventive and promotional aspects of rehabilitation like education, employment and vocational training, reservation, research and manpower development, creation of barrier free environment, rehabilitation of persons with disability, unemployment allowance for the disabled, special insurance scheme for the disabled employees and establishment of homes for persons with severe disability.

It is a significant step which ensures equal opportunities for the people with disabilities The provisions and implementation of the Act still have a number of drawbacks in ensuring equality and non-discrimination to persons with disabilities.

DRAWBACKS OF THE 1995 ACT

1. There is an absence of a precise definition so as to reflect the social dimensions of the disability. Though, now on the world platform the understanding of disability being a medical problem is substituted with considering it as a social problem.

2. It is said that the Act is not fully understood by lawyers, academics and students as there are few commentaries on the Act or material on disability law in India

3.The definitions in the second chapter have been criticized for being narrow, medically oriented and confined to seven categories. The categories defined are analyzed and certain

disabilities that are not defined or are ignored as learning disabilities, long illnesses etc, are identified.

4. Difficulties may also be created by the requirement of certification, as in the case of mental illness, where the 40 per cent disability required is difficult to measure.

5. Another difficulty is that the onus under section26 has been placed on the state, therefore making private schools out of bounds for most. Reservations are excluded for private organizations, which is a major drawback of the Act.

6. The provision for identification of posts has also faced some criticism. This is because there are discrepancies in identification. Identification committees often have no representations of persons with disabilities. Accommodation should make almost all posts suitable.

7. Only negligible steps have been taken towards adapting transport, as compared to education and employment. Regarding public transport, the requirements in the Act are not mandatory and have no time frame for their completion. There is improper awareness and lack of implementation in many regards.

8. Another significant issue discussed is the access to voting rights, towards which some important measures have been taken, however no serious attempts have been taken to publicize them. The erroneous disenfranchisement of a 'not so negligible' part of the population suffering from mental illness has been pointed out.

9. The PDA Act has largely been interpreted to apply to state and state funded institutions. A close reading of the provisions of education shows that they would be applicable to the private sector.

10. Two major issues have not been addressed in the Act are abuse faced by persons with disability within their families and the issue of protection of persons with disabilities from exploitation.

11. Other aspects which could be included are the right to equality, non-discrimination and dignity. The right to independent living and protection against forced institutionalization should also be included.

12. The chief commissioner and commissioners for disabilities who have various powers including inquiring into complaints by persons with disabilities, have remained ineffective and whose reports have been inadequate. The need has been stressed for a stronger research agenda and more accountability of commissioners.

13. As is well known, even among persons with disabilities, women form the most vulnerable section. More focus on women would have been desirable.

14. Section 42, envisages provision of aids and appliances and is crucial and has no in-built limits, the schemes under the provision have cost limits and would not cover substantial equipment required by persons with disabilities to lead fully engaged live

15. The Act focuses mainly on socio-economic rights without paying any heed to the civil-political rights which is direct conflict with the CRPD, (Convention on the Rights of Persons with Disabilities) which is enjoyment of all rights on an equal basis with the non-disabled.

16. The UNCRPD acknowledges the intersectionality of gender and disability or childhood and disability in the experiences of women or children with disabilities. It provides therefore for specific measures to address the concerns of the women and children with disabilities. The PDA Act, however, posits disability as a monolithic category with undifferentiated experience.

After India signed and ratified the UNCRPD in 2007, the process of enacting a new legislation in place of the PDA 1995 Act began in 2010 to bring it in compliance with the UNCRPD. The 2016 RPWD Act has expanded the list of disabilities from 7 to 21 conditions. Speech and Language Disability and Specific Learning Disability have been added for the first time. Acid Attack Victims have been included. Dwarfism, Muscular Dystrophy has been indicated as a special class of specified disability. The new classes of Disabilities also included three blood disorders, Thallassemia, Hemophilia and Sickle Cell disease.

The nomenclature Mental Retardation has been replaced by Intellectual Disability. The Act provides an elaborate definition of Mental Illness and its difference from Mental Retardation. The former being a substantial disorder of thinking, mood, perception, orientation, or memory that grossly impairs judgment, behavior and capacity to recognize

reality or ability to meet the ordinary demands of life but does not include Retardation, which is a condition of arrested or incomplete development of mind of a person, especially characterized by Sub normality of intelligence.

For children with disabilities aged between 6 and 18 years, education will be free. In an attempt to eliminate discrimination, punishment by imprisonment has been mandated for those who intententionally insult or intimidates with intent to humiliate a person with a disability in any place within public view. It is opinion of many that the world has changed by leaps and bounds since the PDA, 1995 and the Act should have been upgraded a long time back. However, better late than never. The real benefits of these Acts can be reaped only if they are implemented rigorously in letter and spirit.

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Online Teaching and Learning: Advantages and Challenges

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ABSTRACT

Technological changes and innovations have immensely modified both, what is taught and how teachers teach in the classroom. Many studies have shown that the students learn best when a variety of methods are used, and that different students respond best to different methods. To this end, computers are being used more and more as teaching tools, to provide students with a wide variety of learning experiences. These approaches include multimedia presentations, computerised question and answer session, and some quite realistic simulations of situations very complex and costly to bring into the classroom. This paper describes how online teaching and learning provides a mechanism to incorporate constructivist, experiential, and student-centre learning practices. The advantages and challenges of online teaching and learning in education have been discussed.

Keyword: Online teaching and learning, pedagogical challenges and advantages, threaded discussions, lurking, webliography.

1. INTRODUCTION

The online teaching & learning is real time (synchronous) and anytime, anywhere (asynchronous) interactions of students with the faculty using the internet facility. In this process the students become more active and reflective learners. The students and teachers those engaged in learning through online teaching also become more familiar with the latest technology.

Online learning is very effective when it is delivered by experienced faculty and subject matter experts. According to Feenberg [1], "The best way to maintain the connection between online education and the values of traditional education is through ensuring that online learning is "delivered" by teachers, fully qualified and interested in teaching online in a web-based environment".

2. ONLINE LEARNING APPROACHES

Synchronous and Asynchronous learning are the two approaches of online learning. *Synchronous learning* is instruction and collaboration in "real time" using the Internet. It involves various online useful tools e.g.:

- Online chat using different apps.
- Virtual hand raising.
- Online audio and video conferencing.
- Sharing of useful data and applications through email.
- Sharing of whiteboard.
- Multimedia presentations.
- Online slide presentations etc.

Asynchronous learning method uses the time-delayed capabilities of Internet facilities and it involves many tools e.g.:

- E-mail.
- Threaded discussions.
- Newsgroups and bulletin boards.
- Various types of files attachments.

This course is only instructor-facilitated and not conducted in real time. The students and teacher are engaged in this course-related work at their own convenience and not like specifically coordinated class sessions. Also, learning does not need to be scheduled like synchronous learning and it allows students and teachers the benefits of anytime, anywhere learning [2].

3. ONLINE AVAILABILITY OF COURSE SOFTWARE / TOOLS

At present, we need not to start from scratch to develop our own online teaching program because large number of useful software tools/programs are available online which can be used to develop an online course as per our need. These online available programs include various useful features such as threaded discussions and document sharing and predesigned design layouts, etc.

Some more popular EdTech tools [3] being used around the world is:

a. **Schoology:** This social site is used for managing lessons, engaging students, sharing contents, and connecting with other educators by the teachers.

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b. **Quora:** It is a great tool for educators. It is used to connect with other professionals or to engage students in discussion after class.

c. **Ning:** It allows anyone to create a personalized social network, important for both teachers and students.

d. **Socrative:** This tool is available for tablets, mobile devices and computers. It engages students through games and exercises on any device they have on hand. Assessing student progress and tracking grades can be easily done by the teachers.

e. **Knewton:** The site personalizes online learning content for each student according to his or her needs i.e. adaptive learning.

f. **Google Docs:** Teachers can create and share documents, presentations, or spreadsheets with students and colleagues as well as give feedback on student-created projects using Google Docs.

g. **YouTube:** This site contains a wealth of great learning materials for the classroom.

h. **Dropbox:** The free Dropbox can easily store, share, and access any kind of data from anywhere with ease-to-use.

i. **Evernote:** An important tool for lesson planning. It can be used to capture great ideas, photos, recordings, or anything else and access it anywhere, and keep it organized.

j. **Twitter:** Twitter is an important tool in education. Teachers can connect with other educators, take part in chats, share their ideas, or even use it in the classroom to reach out to students.

k. **SlideShare:** Using it, presentations, documents, and videos can be uploaded and shared with students and colleagues.

l. **LiveBinders:** It allows collecting and organizing resources. This site also has tools to connect and collaborate and a virtual whiteboard.

m. **OpenStudy:** OpenStudy, a social study site, encourage students to work together to learn class material.

n. **ePals:** This web helps to connect with anyone, anywhere. It helps students in learning various languages and understands different cultures.

o. **Edmodo:** It offers a Facebook-like environment where classes can be connected online. Teachers and students can take advantage of Edmodo.

4. ADVANTAGES OF ONLINE LEARNING

Online learning has the following educational advantages:

- **Student- centred learning:**
  Help students to become more versatile learners by using the variety of online tools drawn on individual learning styles.
- **Collaborative learning:**
  The online work done by group allows students to become more active participants in the learning process. The input should be such that students are able to comprehend what is being discussed, organize their thinking intelligibly and communicate that thinking with carefully constructed language.
- **Easy access to global resources:**
  The online class rooms enables students to easily access online databases and subject experts.
- **Experiential learning through multimedia presentation:**
  New technologies can be used to motivate and engage the students. It can also be used to support students in their learning activities.
- **Easily accessible for non-traditional students:**
  Online delivery of contents of programs or courses makes participation possible for students who experience time, geographic and monetary barriers in gaining access to higher education.
- **Draws student interest in online learning:**
  In the present scenario students are mostly interested in online learning because it is easily accessible.

5. ADVANTAGES OF ONLINE TEACHING

Teaching online courses can:

- **Provide the opportunity to think about teaching in new ways:**
  Online teaching allows experimenting with techniques only available in online environments, for example, webliographies, threaded discussions, lurking etc.
- **To cater ideas and techniques to execute in traditional courses:**
  Online email discussions, a frequently-used practice in online learning, can be assimilated into traditional courses to ease group work.
- **Broaden the horizon of the curriculum:**
  Online teaching can expand existing curriculum to students on a regional, national, and international level.

- **Professional contentment:**

  Teaching online can be a hugely rewarding experience for teachers. Teachers often spell out the heterogeneity of students in online courses as one of the most advantageous facets of teaching online.

- **Instructor availability:**

  Teaching online can offer teachers accessibility not available in traditional classroom settings; for example, at-home, office hours and adjustable work schedules.

6. CHALLENGES OF ONLINE TEACHING

Teachers must be qualified to meet some specific conditions of teaching at a distance. Some of the basic challenges for teachers teaching online are:

- Familiarity with the online environment.
- Capacity to use the medium to its advantage.
- Being available to students on an extended basis electronically.
- Providing quick responses and feedback to students [4].

Massy, William[5] noted that *"Faculty involved in [online learning] find themselves acting as a combination of content experts, learning process design experts, process implementation managers, motivators, mentors, and interpreters. In short, technology can leverage faculty time, but it cannot replace human contact without significant quality losses."*

Yet, the proponents of online learning argue that these hindrances can be overthrown by employing such techniques as the following:

- **Be accustomed with the technology used in the online course:**

  One should be familiar with the technology to be used in the online course, including hardware and software long before the course starts. An online course requires a high level of computing power and reliable telecommunications infrastructure; hence access to these is a must.

- **Use of online environment conveniently:**

  The online medium is essentially a space for written communication. This is both a limitation and a potential of online learning. Written communication can be more time consuming, but *"the ability to sit and think as one composes a question or comment also can raise the quality of discussion."* Furthermore, introvert students

who have trouble participating in a classroom discussion often feel more comfortable in an online classroom [6, 7].

- **Keep connected with students:**

  One should keep in touch with the students by using the technology of the online environment. Communication should be frequent with the students both individually and as a group. There are a number of interesting pedagogical opportunities to keep connected with the students in an online environment.

7. QUALITIES OF SUCCESSFUL ONLINE TEACHERS

In any environment- "good teaching is good teaching" [8]. Experienced online teachers stress that teaching online is less about the mechanics of distance education and "more about what makes for an effective educational experience, regardless of where or when it is delivered" [8]. Following are the qualities of successful online teacher:

- They provide a safe climate for the learners by providing reassurance and support to new online learners.
- They invite student input regarding the goals and agenda for the course.
- They give frequent individualized feedback, using a variety of communication tools.
- They help students connect with one another.

8. SOME BEST PRACTICES OF ONLINE COURSE

While thinking about an online course, the following seven practices may be considered as a framework [9]:

- Encourages contact between students and faculty, especially contact focused on the academic agenda.
- Develops reciprocity and cooperation among students, i.e., teaching students to work productively with others.
- Encourages active learning, i.e., doing and thinking about the learning process.
- Gives prompt feedback and help students understand how to respond.
- Emphasizes time on task by providing repeated useful, productive, guided practice.
- Communicate high expectations and encourages students to have high self expectations.
- Respect diverse talents and ways of learning and engenders respect of intellectual diversity.

In addition to the above the experienced online teachers mention another good practice as being essential to successful teaching, is:

- Includes a well organized course, the structure of which is clearly communicated to the students.

These eight best practices act as a framework for an online course. Of course, it is also imperative to accept that some aspects of good teaching, such as faculty-student contact and cooperation among students, are particularly challenging to achieve in an online teaching environment.

9. MAJOR PEDAGOGICAL CHALLENGES

Experienced online teachers often stress that the issues addressed in an online teaching environment are similar to those faced by teachers in traditional classes.

Three primary challenges associated with online teaching are:

- Effectively structuring online courses.
- Creating community in virtual classrooms.
- Facilitating and encouraging online discussions.

9.1 Structuring an Online Course

9.1.1Course Planning

Designing a course always takes a great deal of time and thought. Therefore-

- Develop course before the teaching begins.
- Allow flexibility in the course design.

9.1.2 Course Organization

Students in online courses are in particular need of a clear organizational structure because each student experiences the course on his or her own. Therefore, it is important to organize the course appropriately so that student participation can be encouraged and student learning may be facilitated. The following points should be taken care of:

- Chunk the syllabus into sections.
- Break assignments into chunks with "touch points".
- Provide due dates for assignments.
- Provide multiple opportunities for graded activities.
- Give credit for participating in online discussions.

9.1.3 Communication

The students experience the course on their own and come to the course with varying levels of technical expertise. Hence, important information should be placed in a variety of places, and should be repeated often, so that students pay attention to it. The following points should be considered:

- Give students a clear overall understanding of the course structure.
- Post course syllabus, policies, expectations, and objectives on the course website.
- Setup a housekeeping clearing house section on the webpage.
- Use printed materials if a student requests.
- Structure online discussions.
- Remind students frequently of due dates.

9.2 Creating Community

"When learners interact with one another, with an instructor, and with ideas, new information is acquired, interpreted, and made meaningful. Such interactions form the foundation of a community of learners. If students feel they are part of a community of learners, they are more apt to be motivated to seek solutions to their problems and succeed. The challenge for distance educators is to develop strategies and techniques for establishing and maintaining 'learning communities' among learners separated by space and/or time" [10].

In an environment where teachers do not necessarily meet learners face-to-face and where students may never have an opportunity to meet their peers in a physical classroom, developing a sense of community can be particularly challenging. Solutions for creating community in an online classroom:

9.2.1 Student-to-Student Interaction

Student learning in any classroom is enhanced when students have the opportunity to connect with each other about their academic work. Therefore, it is important to structure opportunities where students "have" to interact with each other. It is also important, however, that the teacher develop methods for monitoring the success of these interactions. The online teachers offer the following recommendations:

- Limit the size of discussion groups.
- Allow students to post student-to-student communication (as well as student-to-teacher) to get answers to questions.
- Pair each student with a "buddy" in the classroom.
- Encourage peer.

- Structure opportunities for personal.

9.2.2. Faculty-to-Student Interaction

The online environment is not necessarily conducive to this goal. Therefore, experienced online teachers have identified the following ways to help enhance faculty student interactions:

- In the written communication, present yourself as accessible to students.
- Schedule an in-person meeting of the entire class.
- Generate frequent communication.
- Assign discussion group leaders or project team leaders to facilitate group work.

9.2.3. Tone

In the virtual classroom, neither the teacher nor the student has the visual cues of face-to-face communication. Therefore, how the teacher shapes the course climate through written comments and the tone of communications to students is particularly important. The following points should be considered:

- "Humanize" the course.
- Avoid general broadcast questions.
- Consider the tone of your own responses to students.
- Use private email for sensitive communications.

9.3 Facilitating and Encouraging Online Discussions

9.3.1 Facilitating Discussions

One of the ways many instructors work to engage students in their learning and develop a sense of community is to encourage student discussion online. While discussions can be a useful tool, they need careful thought and organization. The following points should be considered when facilitating online discussions:

- Motivate students to participate.
- Encourage substantive and relevant responses.
- Determine the role of the instructor in guiding, moderating, and evaluating the quality of student participation.

9.3.2 Structure discussions so that they are meaningful to students

Discussions in which students are simply asked to repeat course material do not engage student response. Repetitive discussions are unimportant to the learning experience. Engaging topics for online discussions include:

a. Reacting to a controversial reading.
b. Feedback from an exercise performed at home.
c. A debate.
d. A case study.

9.3.3 Make discussion participation "count" in grading policies

Students can be provided incentives to actively participate in online discussions.

9.3.4 Use controversial topics to facilitate discussion

A controversial topic encourages greater student participation and elicits divergent opinions and promotes critical thinking.

9.3.5 Divide students into discussion groups and change the discussion groups

To make the class feel more intimate, the students can be divided into small groups for discussions. Over the time, composition of the group can be changed so that the members of the class know each other, get varied perspectives, and learn how to navigate varied online conversation styles.

9.3.6 Make opportunities for interaction exciting

Experts and other professionals can be invited to participate in threaded discussions. New insights will stimulate more discussion.

9.3.7 Ask students to facilitate online

Online discussion should be encouraged. The students should be given the role of discussion facilitators for more involvement of the students.

10. SOME IMPORTANT TERMS OF ONLINE TEACHING AND LEARNING

Below mentioned are the common terms used in online courses:

a. The Lurking: It is known as reading threaded discussion responses of the student without posting an instant response online. Students who lurk in online courses are like silent listener; because they can listen only but do not speak. In online situations where teachers do not know how many students are "listening," the lurking can be problematic if others do not know you are present.

b. Threaded Discussion: It is known as an Asynchronous discussion. In threaded discussions students may post responses to a prompt at any time. Threaded discussions allow students to work at their own pace, allows the teacher to respond more thoughtfully

since all the responses are not posted simultaneously, and are easier to coordinate than expecting all students to be online at the same time.

c. Webliography: It is an online bibliography related to web resources. For online teaching the teacher uses a web-based bibliography to help students to identity the appropriate internet resources of contents. Sometimes, the students may refer this resource for detailed study of their interest.

11. CONCLUSION

In the present scenario of knowledge explosion, online teaching- learning is growing so rapidly that we need to improvise the skills of organising information and prioritise actions. Online teaching-learning is the latest tool in our hands to do so. To be a successful online teacher and learner, we must believe that meaningful, high quality learning is possible without a traditional classroom. But this will not be realized explicitly due to momentum, or because of technological innovations in other fields. It will, instead, require specific policy and funding changes. These policy changes should focus on increasing high quality online educational choices and opportunity. When properly designed and executed, online teaching and learning is highly effective and rewarding teaching learning practice in tune with the capabilities, skills and spirit of the twenty first century. Students and teachers will recognize the value of true student- centric learning, whether it is fully online or a blend of online or face-to-face, and through their millions of individual choices to transform education.

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Current Scenario of Teacher Training Education Policy in India

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ABSTRACT

The teacher needs to recognise himself/herself as a professional endowed with the necessary knowledge, attitude, competence, commitment, enthusiasm, spirit of seeking new ways and means, capable of reflection, sensitive and perceptive not only to the learners and the institution but also to the emergent concerns in the larger social perspective within which one functions. Teachers need to be educated on multiple intelligence skills and to be prepared for varied perspectives. There is a need to bridge the gaps between teaching competencies expected and practiced and between teaching styles and learning styles. There is a need of integrating techno-pedagogic skills and life skills.

Keywords: Legal Framework, Pre-Service Teacher Education

Policy Context

The Teacher Education Policy in India has evolved over time and is based on recommendations contained in various Reports of Committees/Commissions on Education, the important ones being the Kothari Commission (1966), the Chattopadyay Committee (1985), the National Policy on Education (NPE 1986/92), Acharya Ramamurthi Committee (1990), Yashpal Committee (1993), and the National Curriculum Framework (NCF, 2005). The Right of Children to Free and Compulsory Education (RTE) Act, 2009, which became operational from 1st April, 2010, has important implications for teacher education in the country.

Legal and Institutional Framework

Within the federal structure of the country, while broad policy and legal framework on teacher education is provided by the Central Government, implementation of various programmes and schemes are undertaken largely by state governments. Within the broad objective of improving the learning achievements of school children, the twin strategy is

to prepare teachers for the school system (pre-service training).improve capacity of existing school teachers (in-service training).

For pre-service training, the National Council of Teacher Education (NCTE), a statutory body of the Central Government, is responsible for planned and coordinated development of teacher education in the country. The NCTE lays down norms and standards for various teacher education courses, minimum qualifications for teacher educators, course and content and duration and minimum qualification for entry of student-teachers for the various courses. It also grants recognition to institutions (government, government-aided and self-financing) interested in undertaking such courses and has in-built mechanism to regulate and monitor their standards and quality. For in-service training, the country has a large network of government-owned teacher training institutions (TTIs), which provide in-service training to the school teachers. The spread of these TTIs is both vertical and horizontal. At the National Level, the National Council of Educational Research and Training (NCERT), along with its six Regional Institutes of Education (REIs) prepares a host of modules for various teacher training courses and also undertakes specific programmes for training of teachers and teacher educators. Institutional support is also provided by the National University on Education al Planning and Administration (NUEPA). Both NCERT and NUEPA are national level autonomous bodies. At the state level, the State Councils of Educational Research and Training (SCERTs), prepares modules for teacher training and conducts specialised courses for teacher educators and school teachers. The Colleges of Teacher Education (CTEs) and Institutes for Advanced Learning in Education (IASEs) provide in-service training to secondary and senior secondary school teachers and teacher educators. At the district level, in-service training is provided by the District Institutes of Education and Training (DIETs). The Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs) form the lowest rung of institutions in the vertical hierarchy for providing in-service training to school teachers. Apart from these, in-service training is also imparted with active role of the civil society, unaided schools and other establishments.

Financing of Programmes and Activities

For pre-service training, the government and government-aided teacher education institutions are financially supported by the respective State Governments. Further, under the Centrally Sponsored Scheme on Teacher Education, the Central Government also

supports over 650 institutions, including the DIETs, CTEs and the IASEs. For in-service training, financial support is largely provided by the Central Government under the Sarva Shiksha Abhiyan (SSA), which is the main vehicle for implementation of the RTE Act. Under the SSA, 20 days in-service training is provided to school teachers, 60 days refresher course for untrained teachers and 30 days orientation for freshly trained recruits. Central assistance for in-service training is also provided to District Institutes of Education and Training (DIETs), Colleges of Teacher Education (CTEs) and Institutes of Advanced Studies In Education (IASEs) under the Centrally Sponsored Scheme on Teacher Education. State Governments also financially support in-service programmes. Several NGOs, including multi-lateral organizations, support various interventions, including in-service training activities.

Centrally Sponsored Scheme on Teacher Education

(i) Original scheme

As envisaged in the National Policy on Education (NPE), 1986, and its Programme of Action (POA), a Centrally-Sponsored Scheme of Restructuring and Reorganization of Teacher Education was launched in 1987 to create a sound institutional infrastructure for pre-service and in-service training of elementary & secondary school teachers and for provision of academic resource support to elementary and secondary schools. The Scheme had, inter alia, the following component:-

Setting up of District Institutes of Education and Training (DIETs).

Strengthening of Secondary Teachers Education Institutions into Colleges of Teacher Education (CTEs) and Institutes of Advanced Study in Education (IASEs).

Strengthening of State Councils of Educational Research and Training (SCERTs).

Under the Scheme, recurring and non-recurring Central assistance is provided to the State Governments as resource support to the DIETs, CTEs, IASEs and SCERTs.
(ii)REVISED SCHEME UNDER XTH FIVE YEAR PLAN

The Scheme was revised under the X Plan, with the following main objectives :-

Speedy completion of DIET/CTE/IASE/SCERT projects, which have been sanctioned but not completed up to the end of the IX Plan period.

Making DIETs, CTEs, IASEs sanctioned (and SCERTs strengthened) upto the IX Plan period, optimally functional and operational.

Sanction and implementation of fresh DIET/CTE/IASE/SCERT projects to the extent necessary.

Improvement in the quality of programmes being undertaken by DIETs, etc. – especially those of pre-service and in-service training, so as to enable them to effectively play their nodal role of improving quality of elementary and secondary education in their respective jurisdiction, as measured in terms of levels of learner achievement.

(iii) REVISION OF THE SCHEME

The Central Government entrusted the National Council for Educational Research & Training (NCERT) to evaluate the Teacher Education Scheme. The NCERT submitted its Report in August, 2009. The Report contains several recommendations for revising the Scheme. The Ministry is in the process of revising the Scheme.

Historical Perspective

Teacher education in India has a long past but a short history. Gurukul-centered tradition of the Vedic period was somewhat modified and enriched under the influence of Budhisticvihara-based system. This continued till the 11th century A.D. The arrival of the Muslims witnessed the rise of a parallel Maktab-based tradition and the two traditions thrived side by side till the coming of the British. Both the traditions underwent some modification during this period. Historical records of the decisions taken, the finances made available and their implementation and later evaluation became relatively more systematically organized because of the documentation by the British.

The independence of India on the 15th August 1947 marks a defining moment in the history of our nation. Our long-drawn struggle for independence that preceded it witnessed much strife and bloodshed. Over the years people became unified as never before. Indians wanted Swaraj and had plans about how the nation would develop after the departure of the British. Indian educational system including that of teacher education saw greater reflection of national aspirations and needs of the people during the post-independence period. Much of what happened during the next two decades (1948-68) is crucial to fuller

understanding of what is happening now and in which direction(s) our education system is moving and ought to move.

Teacher Education in Independent India

India's independence, division of the country and related disturbances took place almost simultaneously and drew the attention of national leaders. Transformation of the 'economy of scarcity' into the 'economy of plenty', and reducing unemployment of the youth and food shortage became their main priorities. The system of education and teacher education established by the Raj continued without substantial modification. It was feared that an abrupt departure from the existing system might bring about disruption and destabilization. But as the situation improved, greater attention was paid to education and teacher education. The first step in this direction was setting up of the University Education Commission (1948), which made valuable suggestions regarding pre-service and in-service education of teachers and linking the programme of teacher preparation with the university system.

Subsequently, the Secondary Education Commission (1953) appointed to examine the conditions of school education made specific suggestions about the preparation of teachers. Among its chief recommendations were: (a) two-year training programme for under graduates; (b) one year training for graduates; (c) affiliation of graduate training colleges to universities; (d) training for organizing curricular activities; (e) organization of refresher courses; (f) providing residential facilities; (g) emphasis on research; and (h) exchange of teachers from teachers colleges to schools and vice-versa. Many of the recommendations were accepted and implemented. The Committee on Higher Education for Rural Areas, (1954) and that on Women's Education (1959) also made valuable suggestions for teacher education in their respective areas, but they did not attract national attention because of their limited scope.

The Review Committee on Education (1960) made major recommendations about post-graduate studies in education and research, education of administrators and qualifications of teacher educators. Most of these recommendations were accepted and implemented. Many other committees were appointed to look into teacher education from different perspectives.

The Education Commission (1964-66) submitted a comprehensive report, which served as a basis for establishing a uniform national structure of education covering all stages and aspects of education. It recommended that its isolation be removed and laid stress on the importance of practice teaching and in-service education. It recommended allocation of more funds for teacher preparation, better salaries and improved service conditions for teachers and their educators to attract competent people to the profession. On the whole, it was the first comprehensive and meaningful report on education in general and teacher education in particular. It is noteworthy that the Center and the State Governments implemented various recommendations of the Commission, which resulted in considerable improvement in the professional education of teachers. The attempts to bring about qualitative changes in teacher education continued thereafter. Based on the recommendations of the Commission, the National Policy on Education (1968) was formulated. The working of National Council of Educational Research and Training (NCERT) was also reviewed. The NCERT and its Regional Colleges of education were expected to play a greater role in the education of teachers.

The non-statutory National Council for Teacher Education (NCTE) was set up in 1974 by a resolution of the Government of India and was located in the NCERT. It brought out its curriculum framework in 1978. The statutory NCTE established by an Act of Parliament in 1993 further came out with a Curriculum Framework (1998) to provide guidelines in respect of the content and methodology of teacher education. As a result of this, many universities and state governments revised the courses of teacher education.

During this period, the National Commission on Teachers (1983) studied in depth the problems of teacher education and the status of teachers in society. Its main recommendations were directed at enhancing the period of training, change in selection procedure of teachers, making the pedagogy of teacher education meaningful leading to enrichment of the theory courses and practical work. It suggested changes in the structure of M.Ed. programme also. On the basis of these suggestions, another curriculum framework was issued in 1988 but it could not catch national attention because the work on NPE (1986) had already started, and which opened new vistas in teacher education.

As a statutory body responsible for the coordination and maintenance of standards in teacher education, NCTE issued a Curriculum Framework for Quality Teacher Education in 1998. Before issuing it, the Council sought and ensured a national consensus in its

favour. This is a comprehensive document that deals with almost all aspects of teacher education including its context, concerns and also the social philosophy of teacher education in Indian society which contemplates a synthesis between unity and diversity, freedom and compulsion, social planning and individual initiative. Its salient features were:

* Increased duration and multiple models of teacher education;

* Updating of theoretical and practical components of teacher education by giving new orientation and adding new inputs to the existing programmes

* Emphasis on developing professionalism, commitment, competencies and performance skills;

* Optimal utilization of the potentialities of community, university and information and communication technology for preparation of teachers;

* Making provisions for preparation of teachers for the neglected sections of society, and

* Suggesting alternative educational programmes for teachers of gifted children, teachers of senior secondary schools and specialized programme of education for teacher educators.

Besides, there were other suggestions too which were well received by the nation. Some of its recommendations were implemented. But all of them could not be put into practice due to various reasons.

Teacher Education: Current Status

India has one of the largest systems of teacher education in the world. Besides the university departments of education and their affiliated colleges, government and government aided institutions; private and self-financing colleges and open universities are also engaged in teacher education. Though most teacher education programmes are nearly identical yet their standard varies across institutions and universities. In certain areas, the supply of teachers far exceeds the demand while in others there are an acute shortage as qualified teachers which results in the appointment of under-qualified and unqualified persons. In the situation as it obtains manpower planning becomes an imperative.

Teacher education programmes are essentially institution-based. Their students need to be exposed more and more to the realities of school and community. Internship, practice of teaching, practical activities and supplementary educational activities need to be better

planned and organized more systematically. The curriculum, pedagogy and evaluation of teacher education programmes need to be made more objective as well as comprehensive. Despite improvement of service conditions and perks, the profession is yet to attract the best talent.

For preparing teacher educators, the most popular programme is M.Ed, though a few universities provide M.A. (Education). The M.Ed. programme by and large is of general nature and does not train specialists in different areas. The same course meets the requirements of schools, teacher education institutions and administration, there being little differentiation. The standard of research, whether at M.Phil. Ph.D. or Project level deserves greater attention. It is distressing to observe that research in our universities and institutes is largely conducted for obtaining a degree and much of it is repetitive and incapable of improving theory or practice of teacher education or general education some-times they are replicas of forum researches, the recent promotional rules of University Grants Commission have tended to have a considerable adverse impact on the level of research. The present system of teacher education needs to demonstrate greater sensitivity to its educational as well as social contexts.

Scenario of Teacher Education

India possesses one of the largest systems of teacher education. Besides, the university departments of education and their affiliated colleges, government and aided institutions, private and self-financing colleges and open universities are also engaged in this venture. The programmes are almost identical but the standard varies. Certain institutions are being run with motives other than educational. In certain areas, the supply of teachers far exceeds the demand while in others there is acute shortage and unqualified teachers are working under different names. The manpower planning is practically absent in teacher education. The situation at the elementary level in certain states is comparable to international standards, where DIETs, CTEs and IASEs are making tangible impact on pre-and in-service teacher education. But the same cannot be said about the preparation of secondary, vocational and pre-school teachers.

The programme of teacher education is institution based. The students are not exposed to the realities of school and community. Internship, practice of teaching, practical activities and supplementary educational activities are not paid proper attention. The curriculum,

pedagogy and evaluation of teacher education need improvement and radical transformation. Despite the commendable improvement in service conditions and perks, the profession is yet to attract best brains.

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Impact of Brain-Friendly Teaching Strategies on Professional Development of Teachers

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ABSTRACT

The purpose of this study was to determine whether the application of Brain-Friendly Teaching Strategies and environment affect Professional Development of Teachers. Brain friendly Teaching strategies construct an information that is already stored in the our brain. Thus, continually practicing a given skill to acquire information or ability can help solidify that information or ability in our brain more permanently. Teachers have to retain what they learn not only for their professional development but to transfer new knowledge into action by the process of teaching students. Apart from teaching, teachers have to motivate students, connect new learning with past, peer coaching and action research. Therefore, every teacher have to involve continuously in brain-compatible approaches. Brain Friendly strategies, principles and class room environment, when used consistently increase achievement of students, increase student engagement and make teaching- learning highly constructive. Our Brain will become more dynamic and active, if brain-based teaching – learning Environment is created in classrooms. We have to engage and motivate students, differentiate instruction, create implicit learning opportunities, and enhance classroom management at all grade levels and in all content areas. It has been shown to positively impact academic achievement, student behaviour, and the learning environment itself. Brain friendly environments lead to balanced work-focused behaviour, clear thinking and effective learning to achieve academic success.

Keywords – Brain-Friendly strategies, Classroom environment, Lesson Planning, Professional Development

Introduction –

The learning capacity differs from person to person but all human brains function in the same general way. Our brain absorbs and stores new information that help is to optimize

our academic performance. To learn new knowledge, a person must build on information that is already stored in the brain. Therefore, a strong understanding of the foundational content of a particular subject is essential i to accomplish higher-level learning. Continuous practice of a given skill is required to train our brain and to solidify all information more permanently. Brain-friendly teaching methods and techniques use the natural abilities of the human brain. Brain-friendly methods and techniques make it easy for people to think and learn more naturally and successfully. Brain-friendly learning uses techniques which correspond with the way human brains work naturally. A brain-friendly classroom helps both teachers and students to become more challenged, engaged, enabling and practice skills they will bring into other areas of their life. Each brain is unique. The most effective teachers, therefore, provide many opportunities for enrichment and implement a variety of instructional strategies. When we align our teaching with how the brain best learns, then Students will learn more and teaching is more effortless and enjoyable for us.

"We Learn... 10% of what we READ 20% of what we HEAR 30% of what we SEE 50% of what we both SEE and HEAR 70% of what is DISCUSSED WITH OTHERS 80% of what we EXPERIENCE PERSONALLY 95% of what we TEACH someone else"

-Eldon Ekwall and William Glasser

Brain-Friendly Strategies –

Brain friendly Strategies uses techniques to think, work and learn at the same time. Brain friendly strategies focus on achieving a good physiological state so that learners' brain will function quickly, easily and naturally. Brain friendly strategies promote good physical, mental and emotional condition. Brain friendly environments lead to balanced work-focused behaviour, clear thinking and effective learning to achieve academic success.

Brain friendly Strategies to improve students' memory include:

Storytelling-This is one of the all-time favourite brain activities. Stories have emotional components that attract our brain. They also have beginnings, middles, and endings that helps is to store information in our mind.

Humor- Humor is not only attractive to the emotional system, it also allows for some higher level thinking higher up in the brain. Humor, laughter, and joyfulness release

important brain chemicals that make us feel good and aid in retention. Some research suggests that we remember at least 30 percent more of what we learn with humor.

Games- Learning through play is one of the most powerful ways to learn. Repetition aids in storing memory, and the fun will help the brain mark the connections for later memory encoding.

Analogy-Comparing and contrasting are skills that make a difference in student achievement. Creating their own analogies or listening to the teacher's will assist students' brains in connecting new information to what it is being compared to. Some of those analogy components might bring up personal memories that will provide another learning link.

Metaphor-Metaphor creates a brain-compatible classroom like preparing a special dish or a meal. Memory is enhanced when students create metaphors connecting what they are learning to something they already know.

Repetition- Repetition of delivered content is necessary for every information to be retained for long-term. We can pre-expose and preview information as a way to repeat it.

Novelty and innovation - Involve students as many areas of the brain as you can (art, music, verbal, writing, visual, auditory) and use variety of stories, movement, humour, teamwork, competition.

Movement or Involvement in Physical activity - The brain needs water, Oxygen and Glucose to work effectively for our psychomotor development.

Motivation - Feedback must be given to students to be more corrective, positive, and timely in order for new learning to be retained. Students can correct their own errors in new learning by interacting with each other. We have to provide feedback or set up a system for students to do so themselves.

Balance Learning Styles- We have to Balance learning between

a) Active learning (discussing, pair-share, building, drawing, performing),

b) Passive learning (listening, watching, generalizing, direct instruction),

c) Settling time (walking, reflecting, sleeping, eating, breaks)

11. Physical and Social Environment- Proper Physical Environment like neat ,clean and ventilated learning place or classrooms are required for Brain Based Teaching – Learning. We have to teach students with various for cooperative learning, encourage intrinsic motivation, manage their emotions.

Brain-Friendly lesson planning-

Brain-based lesson planning does not follow a template mainly because the basic premise of brain-based learning is that every brain is unique. Therefore, one-size-fits-all approach does not work. Learning different type of content requires different approaches for different people, depending on variables such as prior learning, experience, preferred modalities, and the type of skill being taught. There are wide range of tools that help encourage the brain to absorb, process, and store experiences and information meaningfully. The following general strategies reflect a brain-based approach to lesson planning-

Pre-expose learners to new material in advance. The more background they have, the greater number of connections they can make in their mind.

Discover your students' background in the subject, and customize your planning to their experience level and preferred learning style.

Create a supportive classroom environment in which questions and exploration are encouraged.

Ensure that your materials and presentation strategies are according to age, grade and mental level of students.

Provide learning experiences to students that reflect their real life experiences.

Help learners encode learning in their memory with appropriate use of downtime, emotions, real-life associations, and mnemonic techniques.

Functional integration happens only over time and with repeated reviews.

The Seven Stages of Brain-Based Planning

The following strategies are organized in a sequence that makes sense to the brain-

Stage 1: Pre-exposure

This stage provides the brain with an overview of the new learning before really digging in. Pre-exposure helps the brain develop better conceptual maps.

Post an overview of the new topic on the bulletin board. Mind maps work great for this.

Teach learning-to-learn skills and memory strategies.

Encourage good brain nutrition, including drinking plenty of water.

Model and practice coping, self-esteem, and life skills.

Create a strong immersion learning environment. Make it interesting!

Consider time-of-day brain cycles and rhythms when planning morning and afternoon activities.

Discover students' interests and background; start where they are in their knowledge base, not where you think they are.

Have learners set their own goals, and discuss class goals for each unit.

Post many colourful peripherals, including positive affirmations.

Plan brain "wake-ups" (e.g., cross-laterals, relax-stretching) every hour.

Plan activities during which students can move around and choose from a menu of offerings.

State strong positive expectations, and allow learners to voice theirs, too.

Build strong positive rapport with learners.

Read your students' learning states, and make any adjustments as you proceed through the lessons.

Stage 2: Preparation

This is the stage at which you create curiosity or excitement. It's similar to the "anticipatory set" but goes further in preparing the learner.

Create a "you are there" experience; give learners a real-world grounding.

Provide the context for learning the topic (can be a repeat of the overview; the classic "big picture").

Elicit from learners what possible value and relevance the topic has to them personally. They must feel connected to the learning before they'll internalize it. Encourage them to express how they feel it is or is not relevant. The brain learns particularly well from concrete experiences first.

Provide something real, physical, or concrete. Conduct an experiment, go on a field trip, or invite a guest speaker who is professionally involved with the topic.

Create complex interdisciplinary tie-ins to the session.

Provide a surprise, or a bit of novelty to engage learners' emotions.

Stage 3: Initiation and Acquisition

This stage provides the immersion. At this stage, provide an initial virtual overload of ideas, details, complexity, and meanings followed by anticipation, curiosity, and a determination to discover.

Provide concrete learning experiences (e.g., case study, experiment, field trip, interview, hands-on learning).

Provide activities that employ a majority (if not all) of the multiple intelligences.

Offer a group or team project that encompasses building, finding, exploring, or designing.

Attend the theatre, put on a skit, produce a commercial, or create a class/school newspaper.

Provide enough choice that learners have the opportunity to explore the subject using their preferred modality: visual, auditory, kinaesthetic, and so on.

A well-designed computer program can be helpful at this stage.

Stage 4: Elaboration

This is the processing stage; it requires genuine thinking on the part of the learners. This is the time to make intellectual sense of the learning.

Provide an open-ended debriefing of the previous activity.

Tie things together so that learning across disciplines occurs (e.g., read a science fiction story about outer space while studying the solar system, discuss how literature relates to science).

Have learners design an evaluation procedure or rubric for their own learning (e.g., write test questions, facilitate peer reviews, design mind maps).

Have learners explore the topic online or at the library.

Watch a video, view slides, or see a theatrical production on the topic.

Stimulate small-group discussions, and have groups report back to the entire class.

Create individual and/or group mind maps reflecting the new material.

Hold a school forum, debate, essay contest, or panel discussion.

Stage 5: Incubation and Memory Encoding

This stage emphasizes the importance of downtime and review time. The brain learns most effectively over time, not all at once.

Provide time for unguided reflection—downtime.

Have learners keep a journal of their learning.

Have learners take a walk in pairs to discuss the topic.

Provide stretching and relaxation exercises.

Provide a music-listening area.

Ask learners to discuss new learning with their family and friends.

Stage 6: Verification and Confidence Check

This stage is not just for the benefit of the teacher; learners need to confirm their learning for themselves as well. Learning is best remembered when students possess a mode or a metaphor regarding the new concepts or materials.

Have learners present their learning to others.

Ask students to interview and evaluate each other.

Encourage students to write about what they've learned (e.g., journal, essay, news article, report).

Have students demonstrate learning with a project (e.g., working model, mind map and video).

Let students present a role-play, a skit, or a theatrical performance.

Quiz students (verbally and/or in writing).

Stage 7: Integration

At this point, it is critical to engage emotions. Make it fun, light, and joyful. This stage instils the all-important love of learning. Never miss it!

Have a class toast (with juice).

Provide sharing time (e.g., peer sharing, demonstration, acknowledgments).

Play music, hang streamers, and blow horns.

Invite another class, parents, the principal, or community guests in to view projects.

Facilitate a class-designed and –produced celebration party.

Incorporate the new learning in future lessons. Never introduce something and then drop it. If it's not important enough to refer to in the future, don't waste time on it to begin with.

Brain-Friendly Class room Environment -

Brain-compatible classroom enhance learning across curricula at all levels of instruction from early childhood to young adulthood. A brain-friendly classroom helps your students feel more challenged and engaged, enabling them to learn and practice skills they will bring into other areas of their life.

Importance of brain-friendly classroom environment for professional Development -

Brain-friendly learning works at different levels through varying strategies. Brain-based education is best understood in three words: engagement, strategies and principles.

Creating a Brain-Friendly Enriched Classroom Environment

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The most beneficial ways to begin the steps for a brain-friendly, enriched classroom environment are as follows.

1. Layout and Use of Space: When designing any space, one must first look at the available square footage and think about how to best maximize that area. For example, our space was long and narrow with an odd half wall that blocked some of our open space. So, a breakfast nook made sense to allow for corner seating and storage (inside the bench seating and under the bench).

2. Furniture Choices: Deciding what furniture options will best accommodate the space is key. Because it is important to have maximal floor space, it is also essential to have ample seating available. Students need comfortable options, but they also need choice, so keep in mind that not all seating has to be uniform within a single space. Children will have different preferences.

3. Colour Selections: Avoiding bright colours and busy patterns is one of the biggest ways to begin transforming your space into a brain-friendly environment. Research shows that more monochromatic and muted colour schemes work best. Additionally, less patterns is key in effort to avoid distracting and confusing learners.

4. Lighting: Allowing natural light to be the main source of light is ideal. However if this isn't an option, bringing in incandescent lighting is preferred over harsh fluorescent lighting. Lamps can warm up a space and provide light better for learning than bright overheads.

5. Nature: Adding plant into a space not only warms the environment and adds oxygen, but also gives students an opportunity for authentic class jobs—like taking care of the plants and flowers rather than always the typical class jobs.

6. Environmental Print and Design: Lower any posters on the walls to be at the eye level of the learner, specifically if the material is meant to be a resource for learning. Also, avoid any laminate that can create a glare—it makes the information difficult to see. Lastly, keeping environmental print that is displayed on your walls to a minimum is important. Avoid distracting walls—less is more. When we have the same anchor charts posted on our walls, they tend to become permanent wall-paper.

7. Organization of Materials: The first step to de-cluttering is keeping our space as a workshop for students—and not a storage room for teaching supplies. Hiding materials behind cabinets and curtains avoids the clutter from becoming an eyesore and a distraction. Having an organized space for student materials is also important.

For influencing educational practice and professional development of teachers, a stimulating classroom environment is required that creates more connections in the brain. The teachers must take advantage of the windows of opportunity by providing an enriched and challenging educational environment to students. The brain makes the most neural connections when it is actively involved in learning, therefore, learning should be multisensory and interactive. Engage students in activities that involve emotion trigger the release of chemicals in the brain that strengthen memory, so learning must be made meaningful to each student. The human brain strives to create connections or patterns, so learning should build on prior knowledge. The brain's hierarchy of tasks starts with physical survival, moves to emotional survival, and only then turns to thinking and learning; students must feel physically safe and emotionally secure before they can learn. The brains of today's students are accustomed to rapidly changing environmental stimuli; therefore, short learning periods are more effective than long ones. Each student is unique , has learned to identify and use his or her unique learning styles and talent strengths. Therefore, we have to provide opportunities for each student to strengthen his or her weaker learning styles and talents.

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Role of ICT in Open and Distance Learning in Imparting Education

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ABSTRACT

Open and distance learning is getting more reliant on information and communication technology (ICT) and has been playing a significant role in the imparting strategies of distance learning. With the advancement in ICT in the field of education it has introduces many of new techniques for educators and learners to enrich and upgrade their knowledge. Educational technologies are replacing direct teacher-student interaction. Distance education helps learners to communicate: learner with instructor, learner with learner and learner with the learning materials with the help of information technology. Technological advancements especially in the area of ICT allow teachers to use various approaches and strategies that could actively engross student's interest. There are many reasons due to which many working people and dropouts in the country could not complete their formal education. ODL helps and supports them to complete their education and ICT plays a vital role in this learning process. The paper emphases on the role of information and communication technologies (ICT) in open and distance learning.

Keyword: Information and Communication Technologies, Open and Distance Learning,

Introduction

Open and Distance Learning: The term 'open learning' is used for the process of learning to provide the student by making it easy and simple. No matter who wants to study and when. Open distance learning is simple process of learning by removing the obstacles of previous qualification, age and so many other factors. It makes good link between the learner and education.we can define open learning as an educational system where: (a) the student has a choice and the freedom to learn (b) the student is

supported by the multimedia based learning materials (c) the tutors create an effective learning environment and infrastructure to enhance and facilitate learning.

Distance education is the method of learning at one's own pace, in one's time, without the boundaries of the formal classroom and without the formal presence of teacher. All the problems and difficulties of the students are solved through correspondence.Borah: distance education is a system of education in which there is no face-to-face relationship between the teachers and taught but they are linked through correspondence, radio talk or voice and TV appearance.

ICT used with open distance learning brings maximum opportunities and possibilities for the students who could not complete the formal educations due to many reasons in their life.

Present open schooling system e.g. National and state level open schools, Research work and university level education system will be strengthen by harnessing the ICTs innovatively.

Now a days, open and distance learning system is provided by online services followed by admission, course material, assignment and examination, request and grievances etc. in good manner. The good teaching and learning process by using ICT in ODL for all the students involves; good notes by mentors, online courses, on demand examination, digital repositories and content, media and broadcast through digital satellite/DTH, Web-tools, Instructional software allowing multiple entry and exit points, guidance and counselling for maintaining the quality in education. ODL is very old concept which was introduced in our country in about 1962 with mainly arts stream and later with many subjects of science stream.

Characteristics of Open and Distance Education

- **Absence of Direct Contact:** It helps to provide education to those who have not been attain formal education.
- **Non Formal Education:** Distance education is the way to provide education to working men and women as well as homemakers to avail the opportunities to complete their education.
- **Postal course**: This is one of the important features to provide education by providing study material to the students and people who want to attain education even in remote areas.

- **No fixed classroom:** As it is flexible mode of learning so need to have formal classroom system.
- **Cheapest way of learning**: Formal education system is costlier then the distance mode of education.
- **Wide coverage:** Distance education system covers the entire population included dropout learner, youth, working men and women, adults as well as girls who are not a part of formal education system.
- **Democratic Education**: It is the system which religiously follows the fundamental right to education prescribed in our Constitution.
- **No compulsion of attendance:** This system is non-formal so there is no compulsion to attend classes in regular mode or to attend classes as per their convenience.
- **Use of mass media:** It uses mass media to impart education to the learners in an effective manner. For example radio, Computer, Internet, and Television. IGNOU and NIOS also provide their education of different courses through their own channels like Gyan Darshan.

Need for Open and Distance Learning

- **Population explosion:** Day by day population of our country is increasing rapidly. To fulfill the need of education of our population, distance education is the best and effective means.
- **Earn while learn:** People who have to give financialassistance to their families can pusuetheir education along with their jobs.
- **Improve qualification and skill:** Person who are in some or other profession can enhance or upgrade their qualification and can acquire skills.
- **Mobility of modern life:**It also provide facilityto access education through various modern tools of ICT from any place of the world.
- **Independent learning:** As it provides complete opportunity to an individual to learn according to their own convenience and pace independently.
- **Democratic Education**: It completely follow our Constitution by providing education to all without any disparity or discrimination.

- **Universal literacy:** It provides broader platform to get education from any of the educational organization who are providing education through non formal mode across the globe.
- **Inclusive Education:** It also support the inclusive education as it does not create discrimination on any grounds of mental or physical disparity.

Use of ICT tools in Open and Distance Education

Distance Education uses various modern tools to impart education to masses effectively.

- Education Satellite
- Broadcast (recorded video)
- Audio Cassettes
- Video Cassettes
- Television Series
- Computer Based Programme
- You Tube
- Online open access resource and study material etc.

Advantages of Open and Distance Learning

- This is very flexible system which is not limited to age, place, sex, caste, creed, or time.
- A learner can progress at his own time and pace.
- It diminishes the pressure on formal education system.
- It makes the learner self- reliant and confident.
- It makes education lifelong process.
- It encourages learning while earning.
- It reaches the learners who live in in remote areas, hills, deserts and sea shores.
- It is economic method of learning without any donation or capitation fee.
- It helps to improve knowledge and skill in the field of interest.

Disadvantages of Open & Distance Education

- It will lead to the deterioration of the academic standards and deteriorate the quality of education.
- The courses become stereotyped gradually due to which students may losses their interest and can not cope with the present demands of various professions.
- Students hardly get opportunities for co-curricular activities as it is not a formal or regular mode of learning.
- Human values such as love, sympathy, cooperation cannot be fostered through distance education so it unable us to develop civilized citizens.
- Students cannot clarify their doubts as it is one way process of learning and doesn't allow them to interact.
- It prepares the students for writing examinations and getting degrees and diplomas rather then to meet out the demands of market.
- It is not possible to provide education related to science, engineering and medicine through distance education as it doesn't provides the opportunity of practical experiences.
- It has limited scope for making people aware of the cultural change and social development.

Problems and Suggestions for the Progress of Open and Distance Learning

- Distance education system should upgrade their courses as per the needs of society and market although it is lagging in fulfilling this aim.
- The course material of distance education is outdated and monotonous so it is essentially require that it should be reviewed by the experts on regular basis.
- Broadcasting and Printing of study material and e-content should be well organized and provided to learners on time.
- Evaluation of students answer sheet and assignment should be done on time so they could get their results timely.
- Timely information should be provided by the distance education centers to their respective websites and portals to the students so they will not miss out any of the important information related to them or their studies.
- Study centres should be suitably equipped with libraries and other facilities.

- Subject experts and experienced professors should be appointed to conduct the personal contact programme.

Conclusion:

The open and distance education system responded positively and quickly to the revolution in ICT. It is because of two main reasons – 1.) The need to minimize the cost of imparting education to students, 2.) To introduce educational programmes to a large number of people to satisfy the need of hour.ICT is a major factor in shaping the distance education system in new global economy and in bringing rapid changes in society. Within the past decade, the new ICT tools have essentially changed the way people learn and to communicate. They also have the potential to transform the nature of education where and how learning takes place, and the roles of students and teachers in the learning process.

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Pedagogical Perspective and Concerns of Inclusive Education in Schools

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ABSTRACT

"Inclusive means that as teachers, we have the responsibility to seek out all available support (from school authorities, the community, families, children, educational institutions, health services, community leaders, and so on) for finding and teaching ALL children."

UNESCO tool Kit

India is a country having huge diversity in population of the students in our classroom. Students are diverse in many ways. Diverse not just in socio-economic background but diverse in their learning style, with physical and mental disabilities, level of intelligence, language disorders etc. To cater the needs of these students we need to have efficient and well equipped teachers who can use various pedagogical approaches in suitable learning environment. In the late 20th century various pedagogical approaches were developed and were largely derived from models of special education. Many of them are still apparent in classrooms around the globe today. A set of principles for the development and implementation of inclusive education pedagogy are identified found to be effective and based on pedagogical approaches. This paper throws light on inclusive education and pedagogical approaches used for learners of special need as well as to focus on various barriers and issues of inclusive education.

Keywords: Inclusive Education, Pedagogical Approaches, Diversity

Introduction

As per our constitution education is now our fundamental right under article 21(A). The Govt. of India along with its various educational bodies like MHRD, NUEPA, NCERT and UGC etc. always try to upgrade and to improvise education system by making

suitable policies for betterment of learners. The education system also has to make provision for pupils with special needs, and at reasonable cost. Special need students are facing various problems like_inferiority complex, lack of understanding, adjustment problems, isolation and segregation, lag behind, feeling of extra burden, insecurity, lack of expression, introvert nature, negative approach towards life, shyness etc.But current arrangements are plainly inadequate, and are not fulfilling all the needs of such learners. It would benefit all children, with and without special needs, if this money were put to better use. The way in which special educational needs is addressed has become a public concern. This is the right time to examine of what seems to work effectively in teaching and learning for the foremost vulnerable groups of learners. The role of teacher is most important in catering the various needs of diversified learners. Teacher has to look after interaction with family,to develop new learning strategies, to develop self-confidence of the learners, to look after their personal needs etc. Teacher is the one who helps the learner of special need to recognize their hidden talents as well asto inculcate positive attitude in the children. Schools should also play significant role into this process.It is the time for schools to provide effective support to bring learning rewards to all their students, whatever their individual needs.Before moving ahead first we need to understand what is inclusive education?

Inclusive Education: Meaning

Inclusive education is when all students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high quality instruction, interventions, and supports that enable them to meet success in the core curriculum (Bui, Quirk, Almazan, &Valenti, 2010; Alquraini& Gut, 2012).

It can also be defined as a learning environment that promotes the full personal, academic and professional development of all learners irrespective of race, class, colour, gender, disability, sexual preference, learning styles and language.

It is considered as a means to eliminate barriers, improve outcomes and remove discrimination in school and Inclusive school is the process of operating a classroom as supportive community where the needs of all members met and people support and accept responsibility for each other.It also helps in fulfilling the needs of all the students with or

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without disabilities for a free and quality education in the least restrictive and most effective environment.

Characteristics of Inclusive Teacher

Inclusive education is the need of today's education system as well as the need of the contemporary society. The aims of inclusive education can be attained only with the help of effective teacher who possess certain characteristics. The characteristics of inclusive education are identified as:-

Principles of Inclusive Education

Inclusive education is based on the following principles:

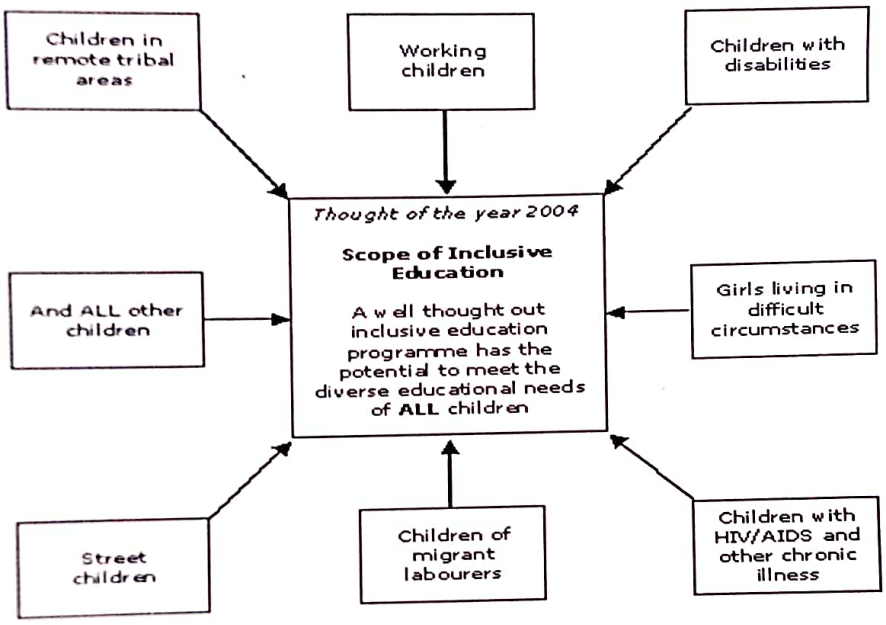
- No discrimination with students
- Provides equal educational opportunity to all
- School adapt to the need of student
- Equal educational benefits for all students.
- The learner's views are listened to and taken seriously.
- It considers individual differences between students and these individual difference act a source of richness and diversity, and not a problem.

Practice of Inclusive Education

The practice of developing inclusive schools involves

- Inclusion is not a onetime event, it is a continuing process,

- Participation of all students, teachers, parents and community members in the work of the school should be strengthened.
- To respond to the diversity of pupils within their locality it is essentially require to restructure the cultures, policies and practices in schools.
- Providing an accessible curriculum and appropriate training programs for all teachers and students.
- Identifying and providing support for staff as well as students.



Need and Importance of Inclusive Education

- To fulfill the constitutional responsibilities
- To enable children to stay with their families
- For the development of healthy citizenship
- For achieving the Universalization
- Developing feeling of self-respect
- For the use of modern technology
- For social equality
- Self-reliant

Aims and Objectives of Inclusive Education

Inclusive education has various aims and objectives in educational and social front.

- Its foremost objective is to provide 'Education for All'.
- It also ensures the 'Protection of Rights' of students.
- It helps in the 'Identification of Skills'.
- It also focuses on 'Development of Social Consciousness'.
- It also help students by preparing them for new Challenges of life.
- And the moot objective of inclusive education is to improve 'Quality of Education'.

Approaches &Strategies for Inclusive Education

Diverse learners are a true reflection of society. In the present time, the field of education is confronting the challenge of inclusion of individuals with disabilities into all aspects of educational programs. Keeping this in view in order to fulfill the need of diverse learners and to teach all suitable arrangements are to be made. So innovative pedagogical approaches and strategies need to be employed in classrooms. Few of them are as follows:-

1) Universal design for learning (UDL)
2) Co-operative learning
3) Peer tutoring
4) Multi-Sensory Teaching

Design of Classroom for Inclusive Education

In an inclusive classroom few factors need to be kept in mind for smooth teaching and learning process. If teacher taking care of such factor than students perform well in classroom. The factors are:-

- Size of class
- Teaching aids
- Restriction of time
- Arrangement of light
- Attention to physical needs
- Special attention to disabled children

Reforms in Curriculum

For better inclusion curriculum need to be reviewed timely. It should be upgraded and improvised as per the need of diverse learner. NCERT is one of the government body who is taking care of it.

- Use of teaching Aids
- Simple curriculum
- Adequate facilities
- Participation in games
- Co-operative curriculum
- Providing reading material
- Multi-level and flexible curriculum
- Participation in co-curricular activities

Barriers in Inclusive Education

Inclusive education is a very big challenge for teachers, schools and society on the path of education. It faces many barriers which are broadly classified into three categories namely attitudinal, environmental and institutional.

- Negative approach
- Lack of physical facilities
- Lack of funds
- Lack of trained teachers
- Social discrimination
- Emotional problems
- Educational problems

Strategies to Improve Inclusive Education

To attain the aims and objectives of inclusive education, Educational institutions and teachers should employ innovative pedagogical strategies. Few strategies are enlisted below:-

- Mainstreaming
- Encourage students
- Improve textbooks
- Special training to teachers
- Special care of special children
- Improve methods of teaching

- Provision of required resources

Conclusion

This article on pedagogy for inclusive education has explored some inclusive pedagogical approaches that may be useful and that have been shown to be adaptable regardless of context. It started with an overview of inclusive education followed by the most common forms of pedagogical practice for inclusive education in use today. It also focusses on role of teacher and educational institution as well as barriers to inclusive education. It also contains aims and objective and principals on which inclusive education is based.

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Right to Education Act, 2009: Ensuring Education for All

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ABSTRACT

The Right to Free & Compulsory Education Act 2009 provides a justifiable legal framework to all the children between the age group of 6-14 years for free and compulsory elementary education. By 'free education' it means that no child is liable to pay any fees, charges or expenses, who has been admitted to a school supported by the appropriate Government, which may prevent the child from pursuing and completing elementary education and 'compulsion' is on the appropriate government. The RTE Act is attached with the belief that the values of equality, social justice and democracy will be re-established and it will lead to the creation of a just and humane society.

KEY WORDS: Right to Education, Education for All

Introduction

An Educated Citizen is an asset to the nation. Education is the backbone of a nation's progress and development. It enables a person to develop his overall personality and imbibe the values preserved in the constitution like equality, liberty, justice and fraternity. It also promotes communal harmony and national integration.

The right to education has been recognized internationally and is established by United Nations by standard-setting instruments. UNESCO mission and Education for All (EFA) have made Right to Education as an important part of their agendas. UNESCO believes in the 'full and equal opportunities for education for all'. In the field of education, UNESCO has elaborated various conventions and recommendations to magnify the impact of right to education and in its various dimensions. The legal and political obligations of the conventions and recommendations of the right to education impose obligations on parties to incorporate them in their domestic legal order signed under the conventions and treaties established by the United Nations and UNESCO. Also these recommendations

need to be added in their national policies and programmes. In order to achieve EFA, it is important to intensify UNESCO's normative action and monitor the results of the right to education across the globe.

During world education forum held in Dakar, Senegal strongly re affirmed the Right to Education, in 2000. The world education forum set goals which includes; expanding early childhood education, universal primary education, gender parity in education, increasing adult literacy and improving educational quality. The target was to ensure that all the children including children belonging to minorities, ethnic groups, girls, children in difficult circumstances get access to quality education by 2015. However, in spite of the commitments made by governments of various countries in Dakar, many signatories' countries were not able to provide primary education to millions of children.

They are still remaining deprived of educational opportunities, especially free and compulsory and quality basic education. Amendment in Indian constitution was done to ensure universal elementary education and to make quality elementary education, the right of every child.

General assembly of United Nation adopted Millennium Development Goals (MDGs) in September 2000. The Millennium Development Goals (MDGs) have helped in developing the focus and emphasis on basic development issues. It has led the governments of the developing nations to do better planning and implement more intensive policies and programmes. The MDGs consists of eight goals which address development issues across the countries. Achieving universal primary education is the second most important goals of the MDGs.

Right to Education Act, 2009

The Right to Free and Compulsory Education Act, 2009, makes education a fundamental right of every child. RTE Act, 2009 is the first Central legislation on school education which is applicable all over India (except Jammu and Kashmir). In 2010, the country achieved a historic milestone when Article 21-A and the Right of Children to Free and Compulsory Education (RTE) Act, 2009 became operative on 1st April 2010. It is a 'historic' legislation of our country. Before this amendment, free and compulsory education was included in Article 45 of the list of 'Directive principles of the State Policy' in the Constitution of India. Article 45 states that "The State shall endeavor to provide,

within the period of ten years from the commencement of this constitution for free and compulsory education of all the children until they complete the age of fourteen years." However, the states were not able to achieve universal free and compulsory education even after the 60 years of independence.

The enforcement of Article 21-A by RTE Act represented a momentous step forward for universalizing elementary education in our country. In 2002, Article 21 A was added as the new fundamental right by 86th amendment. The bill was passed by both the Houses of Parliament and received the assent of President on August 26, 2009. "Right of Children to Free and Compulsory Education Act, 2009", was notified and came into effect from April 1, 2010.

RIGHT TO EDUCATION (21A), "The State shall provide free and compulsory Education to all the children of the age of 6 to 14 years, in such a manner as the State may, by Law, determine."

Key Features of the Act

- The Act provides free and compulsory elementary education for all the children in the age group of 6-14 years in a neighbourhood school.
- 'Free education' means that no child studying in the school of appropriate government is liable to pay any kind of fees, charges or expenses which may prevent her/him to complete elementary education.
- 'Compulsory education' means the compulsion is on the appropriate government to provide free and compulsory elementary education to all the children in the age group of 6-14 years.
- The Act mandates schools to minimum norms and standards of quality education. The minimum norms and standards.
- Every school requires a certificate of recognition.
- The Act prohibits any kind of physical punishment and mental harassment of the children, screening procedures at the time of admission, any kind of capitation fees at the time of admission, private tuitions by teachers and running of schools without recognition.

- It also prohibits the schools from held back any child in the class, or expelled, until the completion of elementary education.
- The Act makes provisions of age and grade appropriate placements of first time enrolled children in schools.
- The Act specifies the duties and responsibilities of appropriate Governments, local authority in providing free and compulsory education.
- Financial and other responsibilities between the governments are also specified in the act.
- The Act also prohibits teachers' engagement in non-educational work, except census, elections and disaster relief.
- The Act mandates appointment of appropriately trained teachers, with the essential training and academic qualifications.
- The Act ensures the development of curriculum with the constitutional values for the all- round development of the child, building on the child's knowledge, potentiality and talent and making the child free of fear, trauma and anxiety through a system of child friendly and child centred learning.
- The Act provides for protection and monitoring of the child rights by the National and State Commissions for Protection of Child Rights, having powers of a civil court.

RTE Act strives for quality education with equity and makes specific recommendations for learning through activities, discovery and exploration in a learner friendly manner. Also, to ensure learning of children with their pace, continuous and comprehensive evaluation is also recommended. It helps in evaluation of a child through continuous feedback on learning and aiming at the all-round development of the child.

The implementation of RTE Act is the responsibility of all the stake holders including, Central Government, State Government, School and Community. Therefore, it is important to include all the stakeholders for the successful implementation of the RTE Act.

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ICT for Inclusive Education: the role of some Assistive Technologies

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ABSTRACT

Inclusion of ICT for all Learners is the need of the hour. This paper reflects upon the need and significance of emergence and issues related to the Inclusion of Information and Communication Technology in the Present scenario. The objectives of the paper includes defining the Inclusive Education in the light of the various Education policies of India, Defining the term ICT as it is used in the Present Education system and further to reflect upon the need, significance of ICT and issues related to Inclusion of ICT in Inclusive classrooms. The basic idea of writing the paper is that Inclusive Education does not only mean including learners with special needs in the normal classroom set up but it in real sense it means providing all the necessary facilities along with appropriate teaching learning methodology to all the learners to deal with their learning requirements. Inclusion of ICT for Inclusive Education is not only limited to equip the classrooms with the projectors and smart boards but ICT inclusion consist of all the ICT facilities which cater the need of all types of learners.

Key words: ICT, Inclusive Education

Introduction:

Inclusive Education means Education well equipped education system to deal with the diversity of learners i.e. the learners who are gifted, Slow learners, Physically challenged, below or above average, average, learning disables, first generation learners, dropouts etc. Inclusive education aims towards mainstreaming all the learners in Education. Promoting inclusive learning is a process of increasing the presence, participation and achievement of all learners in their educational settings" (Hick et al, 2005). An inclusive education setting is understood to be where a learner with a disability or special educational need follows education in a mainstream class with their peers for the largest part of the school day. UNESCO defined inclusive education as 'an on-going process aimed at offering quality

education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination' (UNESCO, 2008 p3). The Lok Sabha today passed "The Rights of Persons with Disabilities Bill - 2016". The Bill will replace the existing PwD Act, 1995, which was enacted 21 years back. The Rajya Sabha has already passed the Bill on 14.12.2016. In the bill it has been mentioned that every child with benchmark disability between the age group of 6 and 18 years shall have the right to free education.

It has been also mentioned that Government funded educational institutions as well as the government recognized institutions will have to provide inclusive education to the children with disabilities.

ICT should be considered as a key tool for promoting equity in educational opportunities as it not only felicitate the students towards teaching learning with the ICT tools but it also provides opportunity to all type of learners for accessing desired information. The promotion of ICT research and development requires a multi-stakeholder approach. Data collection and monitoring in the use of ICT in inclusion should be considered an area requiring attention at all levels of educational provision. Policy review reveals there has also been a significant change in government, societies, and in particular parents expectations of the type of education their children should receive. They expect more choice in the type of school provided, mainstream or specialist, with an increasing expectation these will be in mainstream settings, and that technology will be provided to meet their child's special educational needs or disabilities to ensure their inclusion within the school.

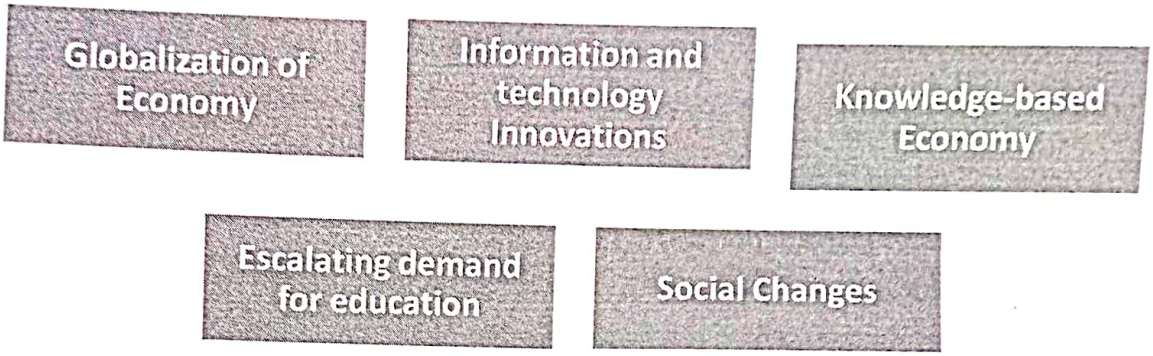
Groups of People Supported by Inclusion according to UNICEF

According to UNICEF Inclusion is concerned with the learning, participation, and equal opportunities for all children, youth, and adults with a specific focus on the groups vulnerable to marginalization and exclusion from society life. The areas of Inclusion which have been included in Inclusive Education are Gender Issues, Minority Groups, Children who need Language Instruction, children with Physical, Emotional and Learning Disability, • people in disadvantaged remote areas, people who missed the opportunity to study in childhood, orphan children pregnant school girls, and teenage mothers, any pupils at risk of disaffection and exclusion. These groups are usually excluded from the mainstream education. Therefore, education for them requires special approaches and

techniques.(Source: ICTs in ducation for people with special needs,UNESCO, Specialized training course 2006)

Why ICT is required in the present scenario?

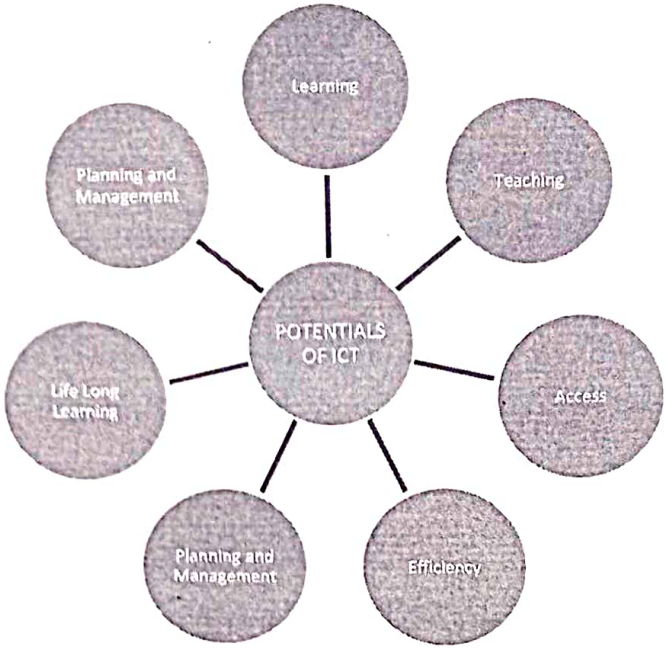
There are various reasons that has led to the emergence of ICT in the present education system



The era of Globalization has integrated technologies in the life of everyone. The integration of ICTs like telecommunication, computers as well as software and audio visual systems to enable users to access, store and to transmit information. Information and Technology Innovations has made flow of knowledge and information flexible and speedy. It has also made Global access to information easy. Online Social media has changed the picture of social communication. The biggest online platforms have user data equal to the population of the world's biggest countries e.g. Facebook reached 1.86 billion monthly active users at the end of 2016. Recent survey reveals that there are world wide 5.5 Billion Face book users presently (source: McKinsey Global Institute Analysis).

Potentials of ICT

ICT must be used as a tool for personalizing learning and for promoting equity in eucation. ICT use for inclusion should be viewed as a means rather than an end in itself.



ICT based interactive technologies like Broadcast Radio, Interactive Radio, Educational TV, Virtual Online Courses etc. helps in to Motivate and engage learners and Bring life to concepts and processes. It also helps in to provide access to world of information and also offers collaborative opportunities and communication.

Features of ICT that support learners with SEN in accessing the curriculum and to support inclusive practice:

Winter and O'Raw (2010) identify the following features of ICT that support learners with SEN in accessing the curriculum and to support inclusive practice:

- Individual attention: in areas such as reinforcement of understanding it can provide structure and variety as well as information rich multimedia content to support subjects such as geography and history (citing Shaw and Lewis 2005). Research indicates significantly improved accuracy of responses and on-task behavior when computers are used by learners with attention deficit disorders (ADD).
- Spell-checker: as a support for young people with dyslexia but also inclusive tool to encourage the production of writing.

- Text-to-speech: supporting a wide range of text disabled young people both through computer based systems and low tech devices such as digital dictation devices.

- Training specific skills: often literacy and numeracy focused and may have assessment of progress/understanding built into the software which modifies the pace and complexity of tasks presented to the student. This type of software can also to provide feedback to the teacher on students time on tasks etc.

- Planning tools: visual organizing or mapping tools to support the structuring of information, for example when planning an essay

The emerging technologies which are likely to have a large impact on teaching, learning, research, or creative expression within education around the globe are: 1.mobiles and apps, and tablet computing 2.game-based learning and personal learning environments 3.augmented reality and natural user interfaces.

ICT-based technologies can also effectively support the Distance Education of students with SEN in three main areas: 1. Interactive communication between educators and learners 2. Delivery of resources 3. Access to learning resources

Some ICT based Assistive Technologies to achieve have been divided into :

1.Synchronous Communication and Collaboration Tools

Synchronous communication stands for the communication tools in which instructor and student come at the same time. In this type of communication student and instructor works at the same time phase like in a traditional classroom setting. But the mode of communication that are used includes Instant Instant messaging services (e.g. MSN Messenger, ICQ etc,.), Chat room, Whiteboard, Multi-user domain object oriented Environment (MOOs) , Audio and Video teleconferencing etc.

2.Asynchronous Communication and Collaboration Tools

In Asynchronous communication system students can learn with their own oace and access the information whenever they get time and opportunity. It is mre flexible for the learners. Learners can make their own time table and schedules and plan their studis accordingly. The advantages of this way of interaction are: a relatively low cost and time flexibility.

Some examples of this type of communication include Emails, Mailing List Forum, Pre recorded web transmissions, Web repositories etc.

Conclusion:

The main aim of Inclusive Education is mainstreaming of the people with different needs in the Education. Earlier the concept was limited to the integration which was again limited to bringing the children with pecial need in the class room. But with the term inclusion UNESCO and WHO have widened the area of Inclusive Education as a wide category of people with special needs have been included in it e.g. people who left their studies or who resides in the remote areas, marginalized sections of the society all have been included in the SEN group for the mainstreaming of whom Inclusive Education has been designed. ICT-based technologies can effectively support students with SEN in such areas as interactive communication between educators and learners; delivery of resources and access to learning resources. Synchronous and Asynchronous are the two type of communication systems which can make the teaching learning process more easy and flexible in Inclusive Education

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Technological Pedagogical and Content Knowledge (TPACK): An Innovative Pedagogical Practice in Teaching and Learning Process

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ABSTRACT

Today's world has become more connective. People work more collaboratively. A pedagogical shift is required to integrate technology, pedagogy, content and knowledge (TPACK) to maximize learning. In order to make the teaching and learning more effective, therefore, it is essential for the teachers to have the knowledge and understanding of how to integrate these aspects together. It can be also known as Digital Pedagogy. An effective teacher has a wide range of teaching and learning strategies, models, techniques and he must know how to create the appropriate conditions for learning. Pedagogy is the heart and soul of teaching and learning. To meet new challenges pedagogy provides frameworks for the multitude decisions teachers have to make about how they teach. Innovation in pedagogy is necessary when current practices are not adequately meeting needs. Technology integration is not a new phenomenon. Technology has become an increasingly important part of students' lives beyond school, and even within the classroom it can also help increase their understanding of complex concepts or encourage collaboration among peers. Sometimes introducing technology in teaching is a complex task. Teacher knowledge of integrating technology into teaching is taking on a greater prominence in the field of educational technology. The educational change brought about by technology, economic and cultural forces in the early 21st century were specially transforming the educational system globally. The developed nations substantially pronounced these changes, but their effect was also apparent in the developing countries like India. Higher education across the world is rapidly changing in many ways especially the accessibility of online digital information and communication technologies.

Key Words: Pedagogical Practices, Teaching learning process, Technological Pedagogical and Content Knowledge

Introduction

The digital age of the 21st century is revolutionizing education with increased teachers and students access to information in newer and faster ways as well as with increased emphasis on social interactions where collaboration and communication are important features of the learning experiences. Today's teachers are faced with increasing expectations that they must respond to the influence of multiple digital technologies, not only integrating them in their instruction but examining the impact of these capabilities on the curriculum and the instructional pedagogies they enact in this new age. Living in the world where technology keeps advancing, teaching with technology becomes a must do for teachers to consider their instruction for new generation. It matters not only for how it helps students construct their current learning but also for how it reinforces citizen's technological literacy and drives technological advances forward. Facing students who are digital natives, teacher's need to be smart about what and how technology assisted instructional approaches are taken.

Teaching is a highly complex task. A teacher has to make thousands of decisions over the course of each day, week and year. Today the world we live in is changing fast politically, economically, socially, and fast technologically. Due to rapid globalization and fast changing developments in information and communication technology, societies had been forced to transform their structures and particularly educational systems to meet the demands of economics. With the rapid development of information and communication technology and the need to acquire skills, global trends in higher education are shifting towards using digital pedagogies. In the 21st century, citizens of the countries need to acquire new skills and competencies to survive in the fast changing environment. Education system have primary role on educating citizen to prosper them to be ready for technology- oriented working environments. For this reason, many countries around the world have been investing considerably in terms of money, expertise, resources and research to integrate technology in education as smoothly as possible so that the classroom environment is made more conducive for enhanced teaching and learning.

Promoting and development of quality teachers is important in enhancing the quality of education. However, most countries both developed and developing are facing the challenging issues of producing quality teachers in the 21st century.The revolution in

digital technologies has brought new opportunities to schools and classroom and has had an effect on learning and teaching activities to a great extent. Hence, teaching in 21st century schools has become a more complex and difficult professions as students of current generation are exposed to digital technologies more than even and are highly competent users of new technologies.

Historical Perspective of the development of TPACK

In the past decades wide ranging research on effective integration of technology in instruction has been conducted by various educators and researchers with the hope that the affordances of technology might be leveraged to improve the teaching and learning process. With the advent of ICT, learning become interesting and allows learners, researchers to assimilate these changes. It had led to drastic changes in the education and training process and the curriculum design. Researches indicated that effective integration of ICT in teaching and learning requires the teacher to understand how ICT weaves with pedagogy and content, better known as technological pedagogical content knowledge. The concept of integrating the knowledge of technology pedagogy and teaching content has evolved from a theoretical framework of **Shulman(1986)** on knowledge of integrating pedagogy and teaching content which is also named as Pedagogical Content knowledge (PCK).But when technology comes and plays an important role in education. **Mishra and Koehler (2009)** developed a new theoretical framework in the knowledge of integrating technology with pedagogy and teaching content called TPACK. It extends the concept of **Shulman's** pedagogical content knowledge about the content and pedagogical skills in teaching activities. Since then the framework has been embraced by the educational technology practitioners, instructional designers and educators.

A number of theories and models have been proposed in harnessing the technology in everyday lessons. Among these attempts TPACK framework introduced has emerged as a representation of the complex relationships between technology, pedagogy and content knowledge. The framework has now been explored and implemented in vary educational institutions. TPACK is one of the major frameworks for assessing the knowledge of a teacher in integrating appropriate technology with pedagogy in the teaching content for fostering students' learning.

TPACK Model by Mishra and Koehler (2009)

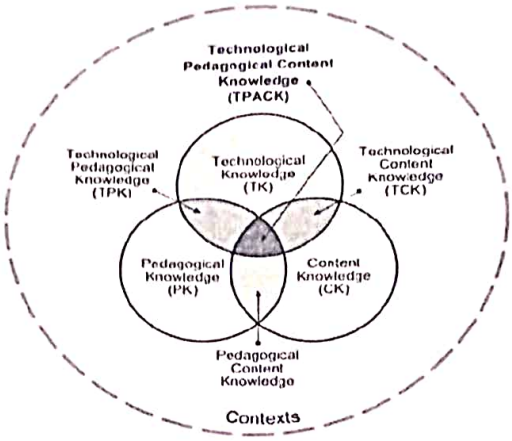

Figure 1 : TPACK Framework by Mishra and Koehler (2009)

To make these choices effectively teacher may draw on what is called pedagogical content knowledge.

At the core of this framework there are three basic areas of knowledge.

- Content (C) : What to teach?
- Technology (T) : By which means?
- Pedagogy(P) : How to teach?

Content (C) is the subject matter that is to be learned /taught. High school mathematics, undergraduate poetry, 1st grade literacy, and 5th grade history are all examples of content that are different from one another.

Technology (T) encompasses modern technologies such as computers, the Internet, digital video, and more commonplace technologies including overhead projectors, blackboards, and books.

Pedagogy (P) 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.

Content Knowledge (CK)

Content knowledge is the knowledge about the actual subject matter that is to be learned or taught. The content to be covered in secondary school subject is differing from the content in an undergraduate course. Knowledge of content is of critical importance for teachers. This would include: knowledge of concepts, theories, ideas, organizational frameworks,

knowledge of evidence and proof as well as established practices and approaches towards developing such knowledge. . It may also include the field's best practices and established approaches to communicating this information to students. Knowledge and the nature of inquiry differ greatly between fields and it is important that teachers understand the deeper knowledge fundamentals of the disciplines in which they teach.

Pedagogical Knowledge (PK)

Pedagogical knowledge is deep knowledge about the processes and practices or methods of teaching and learning and encompasses overall educational purposes, values and aims. This is generic form of knowledge that applies to students learning, classroom management, and lesson plan development and implementation and students evaluation. It includes knowledge about techniques or methods used in the classroom, the nature of target audience, and strategies for evaluating students understanding. A teacher with deep pedagogical knowledge understands how students construct knowledge and acquires skills, and how they develop habits of mind and positive dispositions towards learning as such, pedagogical knowledge requires an understanding of cognitive, social and developmental theories of learning and how they apply to students in the classroom.

Technological Knowledge (TK)

Technological Knowledge is always in a state of flux- more so than the other two "core" knowledge domains in the TPACK framework. This makes it down notoriously difficult. This describes teachers' knowledge of, and ability to use, various technologies, technological tools, and associated resources. It concerns understanding educational technology, considering its possibilities for a specific subject area or classroom, learning to recognize when it will assist or impede learning, and continually learning and adapting to new technology offerings.

Pedagogical Content Knowledge (PCK)

This describes teachers' knowledge regarding foundational areas of teaching and learning, including curricula development, student assessment, and reporting results. PCK focuses on promoting learning and on tracing the links among pedagogy and its supportive practices (curriculum, assessment, etc.), and much like CK, will also differ according to grade level and subject matter. In all cases, though, PCK seeks to improve teaching practices by creating stronger connections between the content and the pedagogy used to

communicate it. Shulman's conception of PCK (1987) highlighted PCK as invoking the pedagogical reasoning and actions that include:

- Comprehension of what to teach
- Transformation of the subject matter through the identification and selection of appropriate examples, explanations and demonstrations while also adapting and tailoring them to learner characteristics

Technological Content Knowledge (TCK)

Technology and knowledge have a deep historical relationship. Progress in fields is as diverse as medicine and history or archeology and physics have coincided with the development of new technologies that afford the representation of data in new and fruitful ways. This describes teachers' understanding of how technology and content can both influence and push against each other. It involves understanding how the subject matter can be communicated via different educational technology offerings, and considering which specific educational technology tools might be best suited for specific subject matters or classrooms.

Technological Pedagogical Knowledge (TPK)

Technological Pedagogical Knowledge is an understanding of how teaching and learning changes when particular technologies are used. This includes knowing the pedagogical affordances and constrains of a range of technological tools as they relate to disciplinarily and developmentally appropriate pedagogical design and strategies. This requires getting a deeper understanding of the constraints and affordances of technologies and the disciplinary context within they function. Another aspect of it concerns understanding how such tools can be deployed alongside pedagogy in ways that are appropriate to the discipline and the development of the lesson at hand.

Technological Pedagogical Content Knowledge (TPACK)

Technological Pedagogical Content Knowledge is an emergent form of knowledge that goes beyond all three component- content, pedagogy and technology. It is an understanding that emerges from an interaction of content, pedagogy and technology knowledge underlying truly meaningful and deeply skilled teaching with technology. TPACK is different from knowledge of all three concepts individually.

TPACK is defined as knowledge of how to use technology for an effective teaching of a specific subject it is a competency that a teacher should possess for successful technology integration. Most recently there is recognition among many educational technologies that pedagogical uses of technology are strongly influenced by the content domains in which they are situated. Having good teachers are very important. Schools and the communities have always sought out the best educators they could get in the belief that their students success depends on it. The most important factor affecting the quality of education is the quality of the individual teachers in the classroom.

Conclusion

Pedagogical practices are only innovative when a teacher uses resources, materials, methods, principles and explanations that have not been employed before. The secret of innovation lies in the fact that it provides something new in comparison to the existing practice. Learning is dependent on the pedagogical approaches teachers use in the classroom. A variety of pedagogical approaches are common in teaching and learning process, but some strategies are more effective and appropriate than others. The effectiveness of pedagogy often depends on the particular subject matter to be taught, on understanding the diverse needs of different learners, and on adapting to the on-the- ground conditions in the classroom and the surrounding context. The best teachers believe in the capacity of their students to learn, and carefully utilize a range of pedagogical approaches to ensure the learning occurs.

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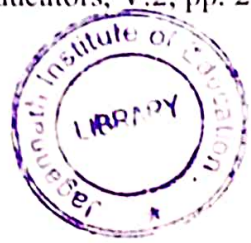

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JIMS Rohini Community Radio 96.9 MHz

This radio is being run by the students and is providing an opportunity to develop programmes for community broadcast. The radio station is used by the college as laboratory for training students specializing in radio broadcast and they work in close coordination with community representatives and leaders. At present the radio broadcasts daily for eight hours with original programme of four hours in morning which is repeated in the afternoon. The students are encouraged to explore the needs of the society, thereafter, they conceive, design and broadcast their own programmes in a real life environment.

JAGANNATH UNIVERSITY | jims | JNIT | 20 years of academic leadership

Nurturing talent | **Re-defining excellence** | **Setting new standards...**

JIMS creating the future!

Jagan Nath Gupta Memorial Educational Society was established in 1993 to develop & train the next generation of professionals who would contribute towards the economic and social development of our country. The delivery standards, thus have been ensured to provide an inspiring learning environment which helps in transforming learning minds into result oriented professionals.

Commitment to the cause of education

An infrastructure of around 10,00,000 sq. feet spread over 9 State-of-the-Art campuses, cutting-edge technology, professional guidance, practical training, international placements, ever evolving curriculum, choice of the best available professional courses... that's not all, the thrust is on the realization of your highest aspirations.

Enviable Infrastructure

All campuses are hi-tech, wi-fi enabled with state-of-the-art laboratories, Labs, well-stocked along with complete recreational facilities. The classrooms are equipped with multimedia and audio-visual equipments to facilitate effective learning and are designed to promote maximum interaction between the faculty and the students.

Guru Mantra

One of our biggest strengths is our faculty members, who have distinguished academic achievements to their credit and are actively involved in teaching, training, research, consultancy and a big pool of expert guest faculty, comprising specialists from industry, government and research institutions for ensuring a new edge to corporate learning and striking a balance between theory and practice.

The distinct Edge

• First Institute among private sector institutes to have been granted a license for FM Community Radio in Delhi • Hotel Management course ranked 2nd in Delhi as per GHRDC survey for CSR 2009 • International Partnerships: Collaboration between Cologne University of Applied Sciences, Germany (CUAS) and JIMS for academics, faculty and student exchange programmes. • Workshops are conducted every year in collaboration with PHDCCI and KAF, Germany for executives of SMEs to develop their awareness, knowledge and skills in areas of Personality Development, Team Building, Total Quality Management, Retail, Banking and Insurance, Project Management etc. • International Conferences with participation of experts from World Bank, International Monetary Fund (IMF), Asian Development Bank, DFID (UK), UK Trade & Economic Policy Division and Australian Trade Commission.

Academic Programmes*

The academic programmes are specifically designed keeping in mind the current Indian economic scenario and the requisite corporate needs that expose the students to concepts, techniques and decision-making tools through an interactive learning process.

The courses are offered at various post graduate and under graduate levels at various campuses according to the needs of the aspirant at large: