

ISSN 2278 - 6899

INIGO EDU RESEARCH

Special Issue November 2019

**NATIONAL SEMINAR ON
"QUALITY EDUCATION FOR SUSTAINABLE DEVELOPMENT"
08.11.2019**

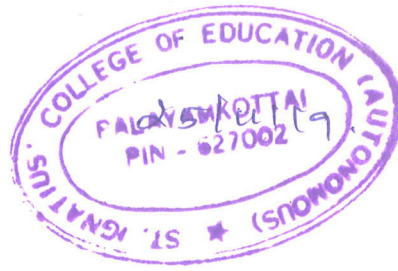


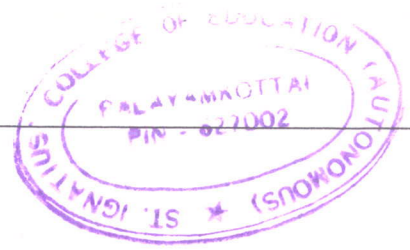
Published by :

St. Ignatius College of Education
(Autonomous)

Palayamkottai, Tirunelveli - 627 002, India.

www.ignatiuscollegeofeducation.com





INIGO EDU RESEARCH
THE JOURNAL ON EDUCATION

ISSN 2278 – 6899

Special Issue – November 2019

EDITORIAL BOARD

CHIEF MANAGING EDITOR

Rev. Sr. A. Magdalene Therese ICM

Secretary,

St. Ignatius College of Education, Palayamkottai.

MANAGING EDITOR:

Rev. Sr. Dr. A. Nirmala Devi,

Principal,

St. Ignatius College of Education, Palayamkottai.

EDITOR-IN-CHIEF:

Dr. M. Maria Saroja ,

Associate professor of Biological Science & Research Director

St. Ignatius College of Education, Palayamkottai

EDITOR:

Mrs. Dr. N. Theresita Shanthi,

Assistant Professor of Physical Science

St. Ignatius College of Education, Palayamkottai

From the Editor's Desk

Dear Readers,

Greetings!

People are in search of alternatives to traditional class room where all would get equitable access to quality lighter education. India is undergoing process of big transformations encompassing all the spheres of the life of its citizens. It should be mentioned that Indian educational system is witnessing a shift from quantity to equality education. The seminar focused on the following thrust areas.

- Professional development of teachers
- Digital education for quality assurance
- Integration of 21st century skills in teaching and learning process
- Quality education for economic development
- Emerging issues in quality education
- Value education towards sustainable development
- Necessity of environmental education for sustainable development
- Emerging trends in educational technology
- Prioritising quality in education for women
- Teacher education and accreditation
- Exploring personalities and realities
- Vocational and inclusive education
- Curriculum transaction for quality inspection
- Critical evaluation for quality control

I am grateful to all the participants for rendering their support to bring the National Seminar proceedings which will give you the varieties of knowledge on quality education for sustainable development in a rational and creative way. The different articles presented in the National Seminar on "Quality Education for Sustainable Development" organized on 08.11.2019 are published as special issue of this Journal.

Dear reader, I hope as you turn though the pages of this proceedings, your knowledge will be strengthened and I wish you all success in your life.

Dr. N. Thersita Shanthi

"QUALITY EDUCATION FOR SUSTAINABLE DEVELOPMENT"

ORGANISING COMMITTEE

Patron

Rev. Sr. A. Magdalene Therese I.C.M

Secretary

St. Ignatius college of Education,

Palayamkottai.

Convener

Rev. Sr. Dr. A. Nirmala Devi I.C.M

Principal

St. Ignatius college of Education.

Palayamkottai.

Organizing Secretary

Mrs. Dr. N. Theresita Shanthi,

Assistant Professor of Physical Science

St. Ignatius college of Education.

Palayamkottai.

Coordinator

Mrs. S. Jebasheela Jenifer,

Assistant Professor of Physical Science

St. Ignatius college of Education.

Palayamkottai.

Joint Coordinator

Mrs. J. Rawoof Nisha,

Assistant Professor of Education

St. Ignatius college of Education.

Palayamkottai.

RESOURCE PERSONS

Dr. S. John Kennady

Principal,
St. John's College,
Palayamkottai.

Dr. K. Thiyagu

Assistant Professor
Department of Education ,
School of Education
Central University of Kerala.

Dr. R. Hari Haran

Assistant Professor
Department of Education,
Indira Gandhi National Tribal University,
Amarkantak (M. P)

Dr. S. Francisa

Associate Professor of History & Research Director (Rid)
St. Ignatius college of Education.
Palayamkottai.

INDEX

SL NO	CONTENT	PAGE
1.	DIGITAL LEARNING VS ENVIRONMENTAL EDUCATION Dr.R.Sasipriya, S. Shifa Sherle	1
2.	INTEGRATION OF 21ST CENTURY SKILLS IN TEACHING AND LEARNING PROCESS– A REVIEW OF THE PUBLISHED RESEARCH EVIDENCES R. Nithya , Dr.V. Rajeswari	9
3	QUALITY MANAGEMENT TOOLS AND TECHNIQUES FOR ACADEMIC DEVELOPMENT Dr.M.MariaSaroja, E.Michael Jeya Priya	19
4.	A TEACHER AND SUSTAINABLE DEVELOPMENT THROUGH QUALITY EDUCATION. G.Kanagamani	27
5.	APPLYING TOTAL QUALITY MANAGEMENT IN TEACHER EDUCATION Dr.C.Thanavathi	31
6.	EXPLORING PERSONALITY AND REALITIES D.Vimala	38
7.	REFORMING EDUCATION THROUGH TECHNOLOGY : A ROADMAP FOR FUTURE Dr. Ananth Babu	44
8.	EDUCATION FOR THE 21ST CENTURY: ROLE OF ICT Ms.P.Aji Udhaya	49
9.	FACTORS AFFECTING QUALITY ASSURANCE IN DIGITAL EDUCATION Dr.A.Michael John , Mr.R.Ramkumar	56
10.	EFFECT OF VIDEOS FROM SOCIAL MEDIA ON EDUCATIONAL PSYCHOLOGY ACHIEVEMENT BETWEEN BIOLOGICAL SCIENCE AND HISTORY B.Ed TEACHER TRAINEES Dr.A.Pushpavalli	60
11.	PROFESSIONAL ETHICS AND RESPONSIBILITIES OF A TEACHER Dr.G.AmuthaRanjini	67
12.	IMPORTANT FACTORS THAT INFLUENCE LEARNING PROCESS Mrs.P.Priya	72
13.	OVERVIEW ON INCLUSIVE EDUCATION A.Shenbaga Sangeetha , V.Varalakshmi	78
14.	ENHANCEMENT IN QUALITY OF LEARNING USING VOICE RECOGNITION TECHNOLOGY Mr.C.A. James, Dr. R. Vijaya , DR. M. Rajeshkumar	83
15.	EDUCATION FOR SUSTAINABLE DEVELOPMENT V.Jeevitha	88
16.	ISSUES IN HIGHER EDUCATION AND THEIR REMEDIES Dr.J.MariaPrema	94

17.	COMPUTER ADAPTIVE TESTING : A NEW HORIZON IN QUALITY TESTING G. Usha ,R. Vijaya ,M.Rajeshkumar	101
18.	PRIORITIZING RURAL GIRLS' EDUCATION FOR LIFELINE DEVELOPMENT Mr.R.Balasubramanian ,Dr. V.Lavanya	109
19.	RECENT STRATEGIES IN TEACHER EDUCATION A. Rajeswari ,S.Anitha	114
20.	EMERGING TRENDS IN EDUCATIONAL TECHNOLOGY S. Arul Immaculate Roseline	119
21.	SOCIAL MEDIA EDUCATION FOR QUALITY ENHANCEMENT M.Sasikala , Dr.V.Veliappan	124
22.	MODERN TRENDS IN EDUCATION V.Dharani, S.Suganthi	129
23.	TEACHER EDUCATION AND ACCREDITATION P.Hajeeral, V.Muthulakshmi	133
24.	USAGES OF DIGITAL TOOLS FOR TEACHING AND LEARNING PrinceAntony J	138
25.	VALUE EDUCATION FOR SUSTAINABLE DEVELOPMENT S.Christabel Bobby	145
26.	VOCATIONALISATION FOR SUSTAINABLE GROWTH IN EDUCATION D.Shermeena	149
27.	DIGITAL LEARNING IN HIGHER EDUCATION M. Gnana kamali, Dr.K.C Bindhu	154
28.	MOBILE LEARNING AS A TOOL OF SUSTAINABLE LEARNING V.Muthu Selvi	159
29.	VALUE EDUCATION TOWARDS SUSTAINABLE DEVELOPMENT S.Sermathangam, Dr.H.Deepa	163
30.	EMERGING TRENDS IN EDUCATIONAL TECHNOLOGY N. Rigana Fathima	171
31.	MASS MEDIA IN EDUCATION T.Sivamalar	178
32.	ACTIVITIES: A DOOR WAY FOR LEARNING Dr.S.Guru Vasuki	186
33.	EFFECTIVE AND QUALITY TEACHING THROUGH SOCIAL MEDIA SUPPORT A. Nancy, Dr. S.P. Denisia	191
34.	QUALITY EDUCATION FOR WOMEN Mrs.Vennila Santha Ruby .C, Viji .M	196
35.	INTEGRATION OF 21 ST CENTURY SKILLS IN TEACHING AND LEARNING PROCESS M. Jesudass	201

36.	DIGITAL LEARNING RESOURCES AND ITS SIGNIFICANCE IN IMPROVING THE QUALITY IN TEACHING LEARNING PROCESS IN HIGHER EDUCATION Dr. G. Selvi Claire Vellut	208
37.	FACTORS INFLUENCING THE SUCCESS OF INCLUSIVE EDUCATION PRACTICES Mrs.C.Girija	213
38.	INTEGRATING 21 st CENTURY SKILLS IN TEACHING Mr.N.Rajmohan	219
39.	QESD – A TRANSFORMATION OF WORLD BY LEARNING Ms.S.Jebasheela Jenifer, Dr.E.C.Punitha	225
40.	ARTIFICIAL INTELLIGENCE IN LEARNING MANAGEMENT SYSTEMS R.Gayathiri Ramamoorthy, Dr.K.C.Bindhu	231
41.	E-LEARNING A SUBSTITUTE FOR CLASSROOM LEARNING Alimalar .S, Dr.K.C.Bindhu	235
42.	THE ROLE OF EDUCATION IN ECONOMIC DEVELOPMENT Dr. T. Rajendran,	239

DIGITAL LEARNING VS ENVIRONMENTAL EDUCATION

Dr.R.Sasipriya
S. Shifa Sherle

ABSTRACT

Children come from diverse backgrounds, particularly in terms of their access to nature and technology. The job of teachers is to help level the playing field and provide all students an equal chance to succeed. By integrating the two apparently opposed areas of nature and technology, we can create an opportunity for young children to become both environmentally and technologically literate. Development in digital learning is driven by one particular need, without fully considering the wider and future consequences. This results in unsustainable development as digital learning leads to severe negative impact on the environment. The longer we pursue unsustainable development, the more frequent and severe its consequences are likely to become, which is why we need to take action now. Environmental education is thus stressed in curriculum in order to reduce the impact of digital learning on environment. Therefore, providing educators with developmentally suitable resources and strategies that support environmental and digital literacy should be an essential component of all technology plans. In this article, we explore how digital learning has an impact on environment and the ways to reduce the electronic waste that increases due to digital learning.

Keywords: Digital Literacy, Environment education, technologically literate, unsustainable development

INTRODUCTION

Diverse worldwide environmental issues are important international concerns, and effective environmental learning is essentially required as activities for sustainable development of human societies. With the growing focus on the ill-effects of pollution and the ever-increasing e-waste due to digital learning the world are becoming more and more conscious of exploring ways to save our environment.

Dr.R.Sasipriya, Assistant Professor in Physical Science, V. O. C College of Education, Thoothukudi.628 008.

S. Shifa Sherley, M.Ed II Year, V.O.C College of Education, Thoothukudi. 628 008.

“Green Initiatives” have been started to help create a better environment for our future generations. These initiatives aim to educate and carve out a path to create a cleaner and greener Earth.

WHAT IS DIGITAL LEARNING?

A digital learning is an integrated set of interactive services online that give teachers, parents, learners, and administrator’s information, tools, and resources, to enhance educational execution and management. When it is used correctly, it can reduce teacher workload, minimize expenditure on administration and IT, and improve the quality of teaching experience and learning. Digital learning has the power to bring a classroom to life with sufficient attributes that benefit both the teachers and students. This type of learning works well with students to master content. They also prepare them with the technical knowledge and skills needed for the future courses.

BENEFITS OF DIGITAL LEARNING OVER TRADITIONAL METHODS

Digital learning takes the place of traditional educational methods more and more each day. With how swiftly classrooms are changing, it is best to forget methods you may remember from when you were in school and start thinking about novel teaching and learning techniques based on digital learning tools and technologies. The taking in of digital learning in the classrooms can vary from simply using tablets instead of paper to using enhanced software programs and equipment as set against to the simple pen. This could elicit using sites, services, programs, teaching tools, and technologies like study aids built for at-home use. Even social networks and communications platforms can be used to create and manage digital assignments and plans. Irrespective of how much technology is integrated into the classroom, digital learning has come to play a crucial role in education. It emancipates students by getting them to be more interested in learning and expanding their range of experiences.

ENVIRONMENTAL EDUCATION

Environmental education encourages children to become good organizers and to think globally but act locally regarding the environment and environmental issues. Environmental education is more than just learning about plants and animals and the

environment: It is an indispensable tool for teaching critical thinking skills and applying these skills to the students' everyday world.

TRADITIONAL EDUCATION METHODS HAVE TO BE REPLACED

Traditional lectures may still exist along with the new-age learning tools and technology, but the lecture materials should be provided as an adjunct to classroom activities and moved online for students to reference outside of the classroom. Classroom time is better used for discussing the curriculum, to take part in activities with teams and completing class projects. Students often have the choice to pace their learning and even study ahead with a digital learning tool if they wish to do so. By helping children think outside their classic learning modes, digital learning inspires creativity and lets children feel a sense of achievement that encourages further learning.

Digital learning tools and technology fill the gaps where traditional classroom teaching lags. In fact, in digital learning some of the efficiencies such tools bring are simply unmatchable by traditional learning techniques. From the environmental impact recognized by the need for less paper for hand-outs and books to saving time with rapid approach to information and the ease of research, digital learning provides a valid way to cut costs, maximize resources and heighten both reach and impact for students and educators alike.

DIGITAL DIVIDE

One of the most astonishing changes in the classroom over the past two decades has been the spectacular advances in classroom technology. The declining costs of technology have enabled schools to gain access to new technologies, while increases in access to advanced technologies offers classrooms novel opportunities to explore different ways to explore and learn about the world. Many students depend on the school setting to provide them with the necessary technological practice to prepare them for success as they go through the school system and prepare for the higher education. For young children, this includes becoming well known with technological terms and the use of different hardware and software.

In addition to developing technology skills, integrating digital learning into the classroom provides students with additional tools to improve their learning experiences. Digital learning can inscribe different learning styles by helping students understand their experiences through verbal, written, spatial, quantitative, and/or graphical means. Digital

learning also can encourage children to become independent thinkers by offering opportunities for learner-centered instruction and digital learning also motivates cooperative learning and increase the interaction between the teacher and the student.

IMPACT OF DIGITAL LEARNING ON ENVIRONMENT

Digital learning leads to increase in electronic waste or e-waste. It is the name for electronic products that have come towards the end of their useful life. This can include computers, monitors, televisions, copiers, printers, fax machines, mobiles, cd/dvd player, cameras, batteries, and many more electronic devices. Used electronic devices can be reused, resold, salvaged, recycled or disposed. E-waste has a horrible effect on the environment and it is important to give your e-waste to a recycling facility. Here are the effects of digital learning on environment

- Computers and most electronics contain toxic materials such as lead, zinc, nickel, flame retardants, barium, and chromium. Specifically with lead, if released into the environment can cause damage to human blood, kidneys, as well as central and peripheral nervous systems.
- When e-waste is warmed up, toxic chemicals are released into the air damaging the atmosphere. The damage to the atmosphere is one of the biggest environmental impacts from e-waste.
- When electronic waste is thrown away in landfills their toxic materials seep into groundwater, affecting both land and sea animals. This can also affect the health of the people in the developing countries where most of the electronic waste is dumped.
- The toxic heavy metals and chemicals from e-waste enter the “soil-crop-food pathway,” one of the most significant routes for heavy metals’ exposure to humans. These chemicals are non-biodegradable they persist in the environment for long periods of time, increasing the risk of exposure.

These dangers posed by improper disposal on the environment ultimately have impacts on human beings -human cost; the health effects of these on humans include birth defects, brain, heart, liver, kidney and skeletal system damage. They also significantly affect the nervous and reproductive systems of the human body. When computer monitors and other electronics are burned, they create cancer-producing toxins which are released into the air we breathe. If electronics are thrown in landfills, these toxins may leach into groundwater

and affect local resources. Thus improper disposal of e-waste not only has effects on the environment, it indirectly and ultimately poses grave dangers to humans and livestock.

WAYS TO REDUCE DIGITAL LEARNING IMPACT ON ENVIRONMENT

The following are ten ways to control these environmental hazards, reduce electronic waste, and save our planet:

1. SELLING OLD ELECTRONICS

One of the best and easiest methods of reducing the electronic waste footprint is to sell or donate the electronic gadgets to those in need. If an individual is planning on selling, he/she should be able to easily find a buyer as they will have the opportunity to purchase the same product at a much lower price than if it were new.

2. DONATING OLD ELECTRONICS

Donating electronics to the needy is also a practice followed by many. It not only gives the gadget a new life, but also makes you feel good about yourself.

3. RECYCLING AND DISPOSING OF E-WASTE PROPERLY

Improperly disposed e-waste is becoming more and more hazardous, especially as the sheer volume of our e-waste increases. For this reason, large brands like Apple, Samsung, and other companies have started giving options to its customers to recycle old electronics. Recycling old electronics allows the expensive electronic parts inside to be reused. This can save a lot of energy and reduce the need for mining of new raw resources, or manufacturing new parts.

4. MAINTAINING ELECTRONICS

One of the best ways to reduce e-waste is to keep the electronics well-maintained, to increase its life. Here are some tips to get you started.

MAINTAINING A LAPTOP OR COMPUTER:

- Make sure PC's hard drive or SSD doesn't get completely full. This allows it to keep running smoothly and quickly for a long time.
- Clean the computer often so that it doesn't get dirty.

- Whenever possible, try not to overcharge the battery. This means unplugging the charger before the laptop hits 100%, which will improve the battery's overall lifespan.

MAINTAINING A MOBILE PHONE:

- Use a phone case and screen protector so that the phone doesn't break when its dropped.
- Similarly to laptops, keep the device clean and don't always fully charge the battery if it's not needed (This improves overall battery lifespan).

By maintaining the electronics it can be kept out of landfills by increasing the total lifespan of the electronic devices.

5. REPURPOSE OR RE-EVALUATE

Always think twice before upgrading or buying a new electronic device:

- Is it a need, or more of a want?
- Will it add value to one's personal or professional life in any way?

If the answer is "no" to any of the above questions, then it might be best to re-evaluate the thoughts, and avoid buying it. To add on to this, one can repurpose old electronics that aren't useful anymore for their intended use. For example: An old mobile phone can work as an mp3 player or even as a GPS device. Don't throw it away, think wisely!

6. STORE DATA ONLINE

Cloud services are much better in reducing your environmental impact. By storing data online, one can access your data from anywhere around the world, without the need to carry a storage device at all times. Cloud storage also gives a large amount of storage, for free or for very cheap. This not only offers convenience, but reduces the need for manufacturing of new storage devices. This indirectly reduces the carbon footprint and reduces the amount of generated e-waste.

7. BUYING ENERGY STAR RATED ELECTRONICS

Investing in environmental friendly electronics has interdependent benefits. A high energy star rated device consumes less energy, reducing the electricity bill significantly. In

addition, because less energy is required, it keeps a check on energy depletion by avoiding over-utilization. It indirectly saves the environment by reducing the load on energy extraction and depletion.

8. LEARN TO REPAIR BROKEN ELECTRONICS AT HOME

Electronic devices are only meant to last for a few years under regular use before failing. However, along with maintaining electronic devices by cleaning them regularly to help them last for longer, one should learn how to fix hardware problems on your device. Nowadays, there are also many Youtube videos teaching how to fix a broken laptop or do a phone screen replacement. Many times, all it takes is a bit of time and patience before gadget is good as new! By learning to repair the electronics at home, one will gain more detailed knowledge and understanding of the hardware of the device. Learning useful repair skills avoids having to travel to a professional repair shop and pay huge fees for other people to fix the device. Best of all, life of the device can be increased and won't have to throw it away.

9. RENTING ELECTRONIC EQUIPMENT INSTEAD OF BUYING

Sometimes specific piece of electronic equipment may be needed only for a limited period of time, for that it would be a better idea to rent it instead of buying it. For example, for sparing use of industrial weighing scales for measuring, say, the weight of the electronic waste, rent the scales instead of buying them. Renting equipment is both cost-effective and Environmentally Friendly Option and thereby not Letting It Rot Away after One or Two Uses.

10. SPREADING THE WORD!

Now, it's time to share the knowledge with other folks who may be less aware about the hazards of e-waste. Next time when someone improperly disposes an old computer or buys a new smartphone for no reason, take the time and share the knowledge on the detrimental effect of their actions. Most importantly, give those people a reason to act on the advice. For example, make sure to let them know about a good place nearby to donate old electronics.

With all the above said, one can be a responsible citizen by being mindful of the dangers posed by e-waste to the environment and do as much as one can to protect the

environment, because ultimately e-waste does not just affect the environment, it ultimately affects the humans as well.

CONCLUSION

Blending environmental and technology literacy into the existing curriculum will help early childhood educators prepare young children to be active, civic-minded adults. Children come from diverse backgrounds, and some may not have easy access to technology. In 21st century educators must take charge to find strategies that level the educational playing field for all learners. Using digital learning fosters student engagement in activities that support appreciation of the environment and natural resources promotes understanding of environmental issues. Across the nation, schools are increasing access to digital learning in the classroom. Therefore, providing educators with developmentally appropriate resources and strategies that support environmental and digital literacy should be an essential component of all technology plans.

With a proper, impactful channel of knowledge delivery and sustained effort of the people, every organization in the world can work towards reducing digital waste and saving the environment. And yes, digital-learning with environmental education can make all the difference!

REFERENCES

- <https://www.gc-solutions.net/blog/training-for-environmental-education-can-e-learning-really-make-a-difference/> Retrieved on dated 27.10.2019.
- https://link.springer.com/chapter/10.1007/978-94-017-0195-2_33. Retrieved on dated 27.10.2019.
- <https://naturalstart.org/feature-stories/bridging-gap-integrating-technology-and-environmental-education>. Retrieved on dated 29.10.2019.
- <https://info.mayermetals.com/blog/5-shocking-environmental-effects-of-e-waste>. Retrieved on dated 29.10.2019.
- <https://get-green-now.com/reduce-ewaste-hazards/> Retrieved on dated 27.10.2019.

INTEGRATION OF 21ST CENTURY SKILLS IN TEACHING AND LEARNING PROCESS– A REVIEW OF THE PUBLISHED RESEARCH EVIDENCES

R. Nithya

Dr. V. Rajeswari

ABSTRACT

In this 21st century, teaching has become difficult that a teacher needs to be more skillful to face the students and at the same time learning has become easy through the help of various innovative technologies. It is evident through this paper that a teacher can equip with all the advancements of the technology in teaching a second language so that they can meet the needs of their students. This paper is based on 50 analyses between 2010 to 2019 and in particular with teaching English as a foreign language. The findings say that learning skills (4C's) such as critical thinking, creativity, collaboration and communication are 21st century basic skills and a learner has to obtain these skills. Information, media and technology knowledge will flourish through these skills.

Key words: 21st Century skills, English as a foreign language, Innovative technology

INTRODUCTION

A 21st century teacher must communicate in the language and style of their students to ensure that their learning is meaningful (Lee, Kean Wah; James, Cynthia C. 2018). Collaboration, communication, critical thinking and creativity are skills most needed by students who are developing into a 21st century global society. (Hall, Christopher Damien, 2018). Critical, creative thinking, collaboration and communication were associated with the ones used in the educational context although 21st century skills may have divergent or specialized meanings in different context. (Bedir, Hasan, 2019). To provide a strong foundation and a bright future for ESOL students, problem-based learning and service-learning (PBSL) should be combined to activate the skills identified by the Partnership for 21st Century Skills (2011).

R. Nithya, Research Scholar, Mother Teresa Women's University, Kodaikanal

Dr.V.Rajeswari, Prof & HOD (former), Department of Education, Mother Teresa Women's University, Kodaikanal.

In the 21st century where information has become easily available and accessible, education has shifted its attention to teaching students how to process and think critically about the information they receive. Welcoming the changes that education constantly witnesses, the field of English Language Teaching (ELT) has embraced the integration of critical thinking. (Nejmaoui, Nabila, 2019). The 21st century demands the explicit integration of learning strategies, digital competences and career abilities. Schools in general and EFL classrooms in particular should provide students with practices and processes focused on acquiring and developing, among other things, creativity, critical thinking, collaboration, self-direction, and cross-cultural skills. (Fandiño, Yamith José, 2013).

RESEARCH EVIDENCES

Knowledge discovered from the study would assist leadership and faculty in creating a vision for future planning for technology innovation and integration. The purpose of the study evaluates the depth of the integration of 21st century skills, in particular the skills of communication and collaboration, in a technology-rich learning environment. (Hall, Christopher Damien, 2018). Pre-service teachers mainly perceived 21st century learning as the integration of technology into classrooms teaching. They were also moderately aware of and involved in 4Cs though they had high positive perceptions towards them. The words and phrases they used for the definition of critical, creative thinking, collaboration and communication were associated with the ones used in the educational context although 21st century skills may have divergent or specialized meanings in different context. Pre-service teachers also held negative beliefs about emphasis of 4Cs in the national curriculum and assessment, but positive beliefs about professional development for 4Cs. (Bedir, Hasan, 2019).

Reflecting a student-centered approach, we incorporate practice into the research process by illustrating a successful integration of Problem-Based learning and Service-Learning (PBSL) into an ESOL learning environment in higher education and then highlight additional curricular opportunities for synthesizing PBSL at the elementary, middle, and high school levels. (Aker, Margaret; Herrera, Luis Javier Pentón; Daniel, Lynn, 2018). The adoption of the new English curriculum known as the Language Arts and Multiliteracies Curriculum (LAMC) for a new basic education curriculum improves specificity, internal coherence, and integration of some essential principles of 21st century learning and language teaching and learning (Barrot, Jessie S. 2019). The interrelationship among five sub-constructs of 21st Century Skills Questionnaire (critical thinking and problem solving, communication and collaboration, interpersonal skills, leadership, and technology literacy)

were analyzed on speaking and writing scores. Among five sub-constructs of 21st century skills questionnaire communication and collaboration had the highest correlation with foreign language speaking score and technology literacy had the highest correlation with foreign language writing score (Motallebzadeh, Khalil; Ahmadi, Fatemeh; Hosseinnia, Mansooreh 2018). Students had access/ability to use mobile devices, and either agreed/strongly agreed that mobile devices increase their learning potential and satisfaction, suggesting they are ready for autonomous learning using mobile devices in partnership with their 21st century learning skills. Recommendations are made for teachers and policy-makers to allow students to complement their learning using mobile devices (Howlett, Graham; Waemusa, Zainee 2019). It is timely to assess the content of the new English curriculum (known as the Language Arts and Multiliteracies Curriculum or LAMC) to help teachers implement it according to its intention (Alburo, Rafaela Mae; Flores, Erica Anne; Yee, Josephine; Barrot, Jessie S. 2019).

The students' ability to use more credible evidence, address alternative arguments, support conclusions, and maintain the logical flow of ideas in their essays did not reach a mastery level in the posttest, yet the average level they reached is reassuring in view of the short time of the training they had. An integration of CT for longer periods may bring forth encouraging outcomes. (Nejmaoui, Nabila, 2019). Meaningful and intellectually stimulating alternatives allow students not just to learn English, but more importantly to understand complex perspectives, use multiple media and technologies, and work creatively with others (Fandiño, Yamith José, 2013). Instructors noted to support language programs that include leadership as course/program/institutional goals as well as stimulating cross-cultural analysis from their exploratory analysis of student responses in course materials (e.g. journal entries, essays, exam items) and explicit positive student feedback from civilian and military student populations (Long, Sheri Spaine; Rasmussen, James, 2017). Through the integration of meaningful curricula, engaging learning tasks, media and technology, authentic materials, and cultural products in the language classroom, teachers can connect their language classrooms with the authentic lives of their learners (Moeller, Aleidine J., Ed. 2016).

The innovative pedagogical strategies, methods, and resources employed by language academics to help graduates transition from university into the world of work through their Modern Foreign Languages MFL studies (Goria, Cecilia, Ed.; Guetta, Lea, Ed.; Hughes, Neil, Ed.; Reisenleutner, Sandra, Ed.; Speicher, Oranna, Ed. 2019). In 21st century which witnesses a range of extraordinary technological improvements; along with the world's turning into global-village-like place, it is a vital need that a common

communication network being built up as a result of the interaction among the people whose nation, culture, language and beliefs differ drastically (Halat, Sercan; Özbay, Murat 2018). The IDDIRR (introduce, demonstrate, develop, implement, reflect, revise) –TPACK (Technological, Pedagogical, Content, Knowledge) + PLC (professional learning community) model, along with a supportive PLC environment and the presence of more knowledgeable peers (MKO), help enhance teachers' TPACK and inspire them to integrate more technology in their classrooms Di Pardo Léon-Henri, Dana, 2019). EFL teachers give positive responses toward the integration of Text to Speech program by using TPACK model. EFL teachers found it useful to use this digital approach in the language learning process (Oktalia, Dwi; Drajiati, Nur Arifah, 2018).

Educators who are willing to meet today's students' needs and expectations in the 21st century composition classes by opening up a new channel for them to express themselves in different modalities. (Balaman, Sevda, 2018). The Bridge21 model, which is technology-mediated, team-led and project-based, brings a particular approach to 21st-century learning and is distinguished by the mixture and focus of scaffolding and consistency in the application (Lawlor, Conneely, & Tangney, 2010). Needs analysis plays a vital role in developing speaking material and results in a powerful tool that helps teachers to design materials in line with the learners' target needs and learning needs (Menggo, Sebastianus; Suastra, I. Made; Budiarsa, Made; Padmadewi, Ni Nyoman, 2019). Students perceive VLEs (Virtual Learning Environment) positively and that VLEs facilitate learning English as a Foreign Language (EFL) and provide an avenue for educators to extend a helping hand to their EFL students. Sustaining VLEs is not an easy task as it raises various concerns and challenges, particularly in the domain of EFL learning (Dayag, Joseph Decena, 2018). The peer collaboration involved gave students ownership of their writing and a better understanding of standards (Roy, Catherine Karen, 2016).

Learning to code encourages students to become creators, not just consumers of the technology they use (Stevens, Vance; Verschoor, Jennifer, 2017). Innovative and creative language teaching approaches such as virtual reality and gamified learning in languages, digital field trips, open educational practice, massive open online courses, and telecollaboration can respond to modern, ever-transforming educational landscapes (Plutino, Alessia, Ed.; Borthwick, Kate, Ed.; Corradini, Erika, Ed. 2019). Incorporation of literature circles has the potential of promoting literacy and language learning in inclusive classrooms with students from diverse cultures and learning needs (Herrera, Luis Javier Pentón; Kidwell, Tabitha, 2018). "A coherent program of the study, collaborative teamwork among

faculty members, interdepartmental cooperative teaching, and the adoption of outcome measurements" are needed for students (Oxford, Raquel, 2010). If the primary goal of education is to teach students lifelong skills needed in society, it is the responsibility of schools and teachers to recognize social changes and promote individual learning needs (Ryu, Jung; Boggs, George, 2016). Gamification not only uses game elements and game design techniques in non-game contexts (Werbach & Hunter, 2012), but also empowers and engages the learner with motivational skills towards a learning approach and sustaining a relax atmosphere (Figueroa Flores, Jorge Francisco, 2015). The 5E model includes five stages: engagement, exploration, explanation, elaboration, and evaluation provide an overview of how a teacher candidate engaged her students in a 5E learning cycle and to explore the process of saponification and learn the concept of pH (Rodriguez, Shelly; Allen, Kelli; Harron, Jason; Qadri, Syeda Ayesha, 2019).

Teachers have access to computers, the Internet, and adequate technical support, but access to professional development opportunities is limited. Teachers use classroom technology frequently, but they are not always consistent in using it to develop students' 21st century skills (Margolin, Jonathan; Pan, Jingtong; Yang, Rui, 2019). The curriculums of public and private institutions generally followed recommended ESL syllabi guidelines and the ESL adult standards. However, Knowles' principles were integrated in the business courses only. Syllabi revision and uniform integration of Knowles principles into curriculum design and the regular updating of the contents of the courses are two important recommendations. (Rodriguez, Wanda). Language learners should think critically and creatively in order to communicate with people to enhance the global collaboration (Gursoy, Esim; Bag, HaticeKübra, 2018). Pressure on teachers to achieve institution-driven objectives -- which focus on reading, writing and speaking skills -- limits students' opportunities for communication through visual texts (Villamizar, Andres Gabriel, 2018).

CONCLUSION

Advancements in the field of technology bring forth drastic changes in the field of Education too. Thus, through this paper, it is proved that teachers develop interests towards the latest innovations and technologies and meet the 21st century learners. Teachers become efficient and effective through the various channels available for them. Through it, they can definitely build a society skillful.

REFERENCES

- Aker, Margaret; Herrera, Luis Javier Pentón; Daniel, Lynn, 2018. Back to the Future: The Implications of Service and Problem-Based Learning in the Language, Literacy, and Cultural Acquisition of ESOL Students in the 21st Century, *Reading Matrix: An International Online Journal*, 18(2), 165-181.
- Alburo, Rafaela Mae; Flores, Erica Anne; Yee, Josephine; Barrot, Jessie S, 2019. Examining the Secondary English Curriculum in the Philippines: A Step to Move Forward, *Curriculum and Teaching*, 34(1), 5-21.
- Balaman, Sevda, 2018. Digital Storytelling: A Multimodal Narrative Writing Genre, *Journal of Language and Linguistic Studies*, 14(3), 202-212.
- Barrot, Jessie S, 2019. 4 English Curriculum Reform in the Philippines: Issues and Challenges from a 21st Century Learning Perspective, *Journal of Language, Identity, and Education*, 18(3) 145-160.
- Bataineh, R. F., & Mayyas, M. B, 2017. The utility of blended learning in EFL reading and grammar: A case for Moodle. *Teaching English with Technology*, 17(3), 35-49.
- Bauer, Ciarán; Devitt, Ann; Tangney, Brendan, 2015. Alignment of CMC Language Learning Methodologies with the Bridge21 Model of 21C Learning, *Research-publishing.net*.
- Bedir, Hasan, 2019. Pre-Service ELT Teachers' Beliefs and Perceptions on 21st Century Learning and Innovation Skills (4Cs), *Journal of Language and Linguistic Studies*, 15(1), 231-246.
- Blood, R, 2002. *The blog handbook: Practical advice on creating and maintaining your blog*. Cambridge: Perseus Publishing.
- Dayag, J, 2018. Reaching out: Facilitating EFL learning through Edmodo. *International Journal of Advanced Multidisciplinary Scientific Research*, 1(2), 1-7.
- Dayag, Joseph Decena, 2018. EFL Virtual Learning Environments: Perception, Concerns and Challenges, *Teaching English with Technology*, 18(4), 20-33.
- Dhonau, Stephanie, Ed, 2013. MultiTasks, MultiSkills, MultiConnections. Selected Papers from the 2013 Central States Conference on the Teaching of Foreign Languages, *Central States Conference on the Teaching of Foreign Languages*.

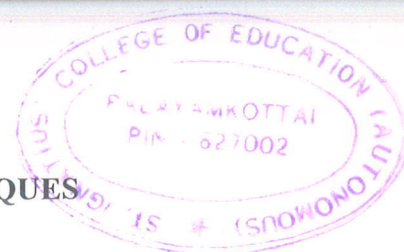
- Di Pardo Léon-Henri, Dana, 2019. Going beyond Words and Actions: Teaching Metacognitive and Soft Skills to ESP Communication Students at the Dawn of the Fourth Industrial Revolution, *Research-publishing.net*.
- Fandiño, Yamith José, 2013. 21st Century Skills and the English Foreign Language Classroom: A Call for More Awareness in Colombia, *GIST Education and Learning Research Journal*, 7(2), 190-208.
- Figueroa Flores, Jorge Francisco, 2015. Using Gamification to Enhance Second Language Learning, *Digital Education Review*, 27, 32-54.
- Gorla, Cecilia, Ed.; Guetta, Lea, Ed.; Hughes, Neil, Ed.; Reisenleutner, Sandra, Ed.; Speicher, Oranna, Ed, 2019. Professional Competencies in Language Learning and Teaching, *Research-publishing.net*.
- Gursoy, Esim; Bag, HaticeKübra, 2018. Is It Possible to Enhance the Creative Thinking Skills of EFL Learners through Training?, *Advances in Language and Literary Studies*, 9(6), 172-182.
- Halat, Sercan; Özbay, Murat, 2018. The Examination of Listening Anxiety Level of the Students Who Learn Turkish as a Foreign Language, *Universal Journal of Educational Research*, 6(1), 1-10.
- Hall, Christopher Damien, 2018. Evaluating the Depth of the Integration of 21st Century Skills in a Technology-Rich Learning Environment, *ProQuest LLC, Ed.D. Dissertation*, College of Saint Elizabeth.
- Hamly, C. Coombe, S. Troudi& C. Gunn (eds,) *Proceedings of the 18th TESOL Arabia conference: Achieving Excellence through Life Skills Education* (pp. 22-28). Dubai: TESOL Arabia.
- Herrera, Luis Javier Pentón; Kidwell, Tabitha, 2018. Literature Circles 2.0: Updating a Classic Strategy for the 21st Century, *Multicultural Education*, 25(2), 17-21.
- Howlett, Graham; Waemusa, Zainee, 2019. 21st Century Learning Skills and Autonomy: Students' Perceptions of Mobile Devices in the Thai EFL Context, *Teaching English with Technology*, 19(1), 72-85.
- Laakkonen, Ilona; Taalas, Peppi, 2015. Towards New Cultures of Learning: Personal Learning Environments as a Developmental Perspective for Improving Higher Education Language Courses, *Language Learning in Higher Education*, 5(1), 223-241.

- Lee, Kean Wah; James, Cynthia C, 2018. Exploring a Transformative Teacher Professional Development Model to Engender Technology Integration in the 21st Century ESL Language Classrooms, *International Journal of Computer-Assisted Language Learning and Teaching*, 8(4), 13-31.
- Long, Sheri Spaine; Rasmussen, James, 2017. Integrating Leadership and Foreign Language Literary Studies, *Dimension*, 76-98.
- Margolin, Jonathan; Pan, Jingtong; Yang, Rui, 2019. Technology Use in Instruction and Teacher Perceptions of School Support for Technology Use in Iowa High Schools, *Regional Educational Laboratory Midwest*.
- Menggo, Sebastianus; Suastra, I. Made; Budiarsa, Made; Padmadewi, Ni Nyoman, 2019. Needs Analysis of Academic-English Speaking Material in Promoting 21st Century Skills, *International Journal of Instruction*, 12(2), 739-754.
- Mimirinis, M., & Bhattacharya, M, 2007. Design of virtual learning environments for deep learning. *Journal of Interactive Learning Research.*, 1(1), 55-64.
- Moeller, Aleidine J., Ed, 2016. Fostering Connections, Empowering Communities, Celebrating the World. Selected Papers from the 2016 Central States Conference on the Teaching of Foreign Languages, *Central States Conference on the Teaching of Foreign Languages*.
- Motallebzadeh, Khalil; Ahmadi, Fatemeh; Hosseinnia, Mansooreh, 2018. Relationship between 21st Century Skills, Speaking and Writing Skills: A Structural Equation Modelling Approach, *International Journal of Instruction*, 11(3), 265-276.
- Nejmaoui, Nabila, 2019. Improving EFL Learners' Critical Thinking Skills in Argumentative Writing, *English Language Teaching*, 12(1), 98-109.
- Nguyen, Nhat Quang; Lee, Kean Wah; Phuong, Dung Ngoc; Naidu, Sivabala, 2019. An Investigation into Using Flipped Classroom Model in an Academic Writing Class in Vietnam, *International Journal of Computer-Assisted Language Learning and Teaching*, 9(1), 32-57.
- Norris, Cathleen A.; Soloway, Elliot; Tan, Chun Ming; Looi, Chee-Kit, 2013. Inquiry Pedagogy and Smartphones: Enabling a Change in School Culture, *Educational Technology*, 53(4), 33-40.
- Oktalia, Dwi; Drahati, Nur Arifah, 2018. English Teachers' Perceptions of Text to Speech Software and Google Site in an EFL Classroom: What English Teachers

Really Think and Know, *International Journal of Education and Development using Information and Communication Technology*, 14(3), 183-192.

- Oxford, Raquel, 2010. Promise (Un)Fulfilled: Reframing Languages for the Twenty-First Century, *Hispania*, 93(1), 66-68.
- Patton, M.Q. 2002. *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage Publications.
- Plutino, Alessia, Ed.; Borthwick, Kate, Ed.; Corradini, Erika, Ed, 2019. New Educational Landscapes: Innovative Perspectives in Language Learning and Technology, *Research-publishing.net*.
- Richardson, W, 2010. *Blogs, wikis, podcasts, and other powerful webtools for classrooms* (3rd ed.). California: Sage.
- Rodriguez Sanchez, Doralis, 2017. Transforming ESL Teachers' Perspective on Media Literacy: An Action Research Project, *ProQuest LLC, Ed.D. Dissertation*, University of Puerto Rico, Rio Piedras (Puerto Rico).
- Rodriguez, Shelly; Allen, Kelli; Harron, Jason; Qadri, Syeda Ayesha, 2019. Making and the 5E Learning Cycle, *Science Teacher*, 86(5), 48-55.
- Rodriguez, Wanda. Analysis of Knowles' Andragogical Principles, Curricular Structure, and Adult English as a Second Language Standards: Curriculum Implications, *ProQuest LLC, Ed.D. Dissertation*, University of Puerto Rico, Rio Piedras (Puerto Rico).
- Roy, Catherine Karen, 2016. Be Creative and Collaborative: Strategies and Implications of Blogging in EFL Classes, *English Language Teaching*, 9(7), 129-145.
- Ryu, Jung; Boggs, George, 2016. Teachers' Perceptions about Teaching Multimodal Composition: The Case Study of Korean English Teachers at Secondary Schools, *English Language Teaching*, 9(6), 52-60.
- Salmon, G, 2003. *E-moderating: The key to teaching and learning online*. London: Routledge Falmer.
- Schuetz, D, 2005. Cultural models and cultural self-awareness: A discourse-analytical approach to the language of students' online journal entries. PhD Thesis: Pennsylvania State University.

- Scully, J, 2008. Virtual learning environments supporting integrated language skills. Paper presented at the 8th Annual ELT Conference. Integration of Skills: Creative Methods and Techniques in ELT, Muscat: Sultan Qaboos University.
- Sharkey, Judy, 2018. The Promising Potential Role of Intercultural Citizenship in Preparing Mainstream Teachers for Im/Migrant Populations, *Language Teaching Research*, 22(5), 570-589.
- Solomon, G., & Schrum, L. 2007. *Web 2.0—New Tools, new schools*. Washington, DC: International Society for Technology in Education.
- Stevens, Vance; Verschoor, Jennifer, 2017. Coding and English Language Teaching, *TESL-EJ*, 21(2).
- Tuzlukova, V., Al Busaidi, S., Coombe, C. & Stojkovic N. 2016. Research on technology-based language education in the Sultanate of Oman: Perspectives for student skills' enhancement. *Journal of Teaching English for Specific and Academic Purposes*, 4(1), 1-8.
- Villamizar, Andres Gabriel, 2018. Examining Intersections between Visual Literacy and Digital Technologies in English Language Programs for Higher Education, *Journal of Visual Literacy*, 37(4), 276-293.
- Ward, J. 2004. Blog assisted language learning (BALL): Push button publishing for the pupils. *TEFL Web Journal*, 3(1), 1-16.
- Warner, R. 2013. Personal and professional skills of TESOL practitioners of the future. In P. Davidson, M. A.



QUALITY MANAGEMENT TOOLS AND TECHNIQUES FOR ACADEMIC DEVELOPMENT

Dr.M.MariaSaroja
E.Michael Jeya Priya

ABSTRACT

The world has realized that the economic success of the states is directly determined by their education systems. Education is a Nation's Strength. A developed nation is inevitably an educated nation. Indian higher education system is the third largest in the world, next to the United States and China. Since independence, India as a developing nation is contentiously progressing in the education field. Although there have been lot of challenges to higher education system of India but equally have lot of opportunities to overcome these challenges and to make higher education system much better. There have been challenges to higher education in the past, these most recent calls for reform may provoke a fundamental change in higher education. This change may not occur as a direct response to calls for greater transparency and accountability, but rather because of the opportunity to reflect on the purpose of higher education. This paper focus on Quality management tools and techniques for academic development in India.

Keywords: Higher education, Academic development, Accountability

INTRODUCTION

In future, India will be one of the largest education hubs. India's Higher Education sector has witnessed a tremendous increase in the number of Universities/University level Institutions & Colleges since independence (Burns,2010).The 'Right to Education Act' which stipulates compulsory and free education to all children within the age groups of 6-14 years, has brought about a revolution in the education system of the country with statistics revealing a staggering enrolment in schools over the last four years (Stewart, 2011). The involvement of private sector in higher education has seen drastic changes in the field. Today over 60% of higher education institutions in India are promoted by the private sector(Wallace, 2006). This has accelerated establishment of institutes which have originated over the last decade making India home to the largest number of Higher Education institutions in the world, with student enrolments at the second highest (Pandi,Rao & Jeyathailagar,2009). The quality of education in India whether at primary or higher education is significantly poor as compared to major developing nations of the world. As of 2008, India's post-secondary institutions offer only enough seats for 7 per cent of India's college-age population, 25 per cent of teaching positions nationwide are vacant, and 57 per cent of college professors lack either a master's or PhD degree .

Dr.M.MariaSaroja, Research Director, Associate Professor of Biological Science,
St.Ignatius College of Education(Autonomous),Palayamkottai,Tirunelveli-2
E.Michael Jeya Priya, Assistant Professor of Biological Science,
St.Ignatius College of Education(Autonomous),Palayamkottai,Tirunelveli-2

As of 2011, there are 1522 degree-granting engineering colleges in India with an annual student intake of 582,000 plus 1,244 polytechnics with an annual intake of 265,000 (Sharma & Sharma,2015). However, these institutions face shortage of faculty and concerns have been raised over the quality of education (Pavel,2012). As higher education systems grow and diversify, society is increasingly concerned about the quality of programmes, public assessments and international rankings of higher education institutions (Khan,2015). However these comparisons tend to overemphasise research, using research performance as a yardstick of institutional value. If these processes fail to address the quality of teaching, it is in part because measuring teaching quality is challenging.

CHALLENGES IN HIGHER EDUCATION IN INDIA

It is our 69th year of independence still our education system has not been developed fully. We are not able to list a single university in top 100 universities of the world. Various governments changed during these six decades. They tried to boost the education system and implemented various education policies but they were not sufficient to put an example for the universe. UGC is continuously working and focusing on quality education in higher education sector. (Sheikh,2017).Still we are facing lot of problems and challenges in our education system. Some of the basic challenges in higher education system in India are discussed below:

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

Equity: There is no equity in GER among different sects of the society. According to previous studies the GER in higher education in India among male and female varies to a greater extent. There are regional variations too some states have high GER while as some is quite behind the national GER which reflect a significant imbalances within the higher education system.

Quality: Quality in higher education is a multi-dimensional, multilevel, and a dynamic concept. Ensuring quality in higher education is amongst the foremost challenges being faced in India today. (Sharma,2013).However, Government is continuously focusing on the quality education. Still Large number of colleges and universities in India are unable to meet the minimum requirements laid down by the UGC and our universities are not in a position to mark its place among the top universities of the world.

Infrastructure: Poor infrastructure is another challenge to the higher education system of India. (Sheikh,2017).There are large number of colleges which are functioning on second or third floor of the building on ground or first floor there exists readymade hosiery or photocopy shops.

Political interference: Most of the educational Institutions are owned by the political leaders, who are playing key role in governing bodies of the Universities. They are using the

innocent students for their selfish means. Students organise campaigns, forget their own objectives and begin to develop their careers in politics.

Faculty: Faculty shortages and the inability of the state educational system to attract and retain wellqualified teachers have been posing challenges to quality education for many years. Large numbers of NET / PhD candidates are unemployed even there are lot of vacancies in higher education, these deserving candidates are then applying in other departments which is a biggest blow to the higher education system.

Accreditation: As per the data provided by the NAAC, as of June 2010, “not even 25% of the total higher education institutions in the country were accredited. And among those accredited, only 30% of the universities and 45% of the colleges were found to be of quality to be ranked at 'A' level”.

Research and Innovation: there are very nominal scholars in our country whose writing is cited by famous western authors. There is inadequate focus on research in higher education institutes. (Sharma,2013). There are insufficient resources and facilities, as well as, limited numbers of quality faculty to advice students. Most of the research scholars are without fellowships or not getting their fellowships on time which directly or indirectly affects their research. Moreover, Indian Higher education institutions are poorly connected to research centers. So, this is another area of challenge to the higher education in India.

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

SUGGESTIONS FOR IMPROVING QUALITY OF HIGHER EDUCATION

There are some suggestions and Expectations from Government, Industry, Educational Institutions, Parents and Students for improving quality of higher education

1. Towards a Learning Society- As we move towards a learning society, every human activity will require contributions from experts, and this will place the entire sector of higher education in sharp focus. Although the priorities, which are being assigned today to the task of Education for All, will continue to be preponderant, the country will have to prepare itself to invest more and more on higher education and, simultaneously, measures will have to be taken to refine, diversify and upgrade higher education and research programmes(Diana, &Thomas,2013).

2. Industry and Academia Connection- Industry and Academia connect necessary to ensure curriculum and skills in line with requirements. Skill building is really very crucial to ensure employability of academia to understand and make sure good jobs (keeping in view knowledge + skills+ global professional skills = good jobs).

3. Incentives to Teachers and Researchers- Industry and students are expecting specialized courses to be offered so that they get the latest and best in education and they are also industry ready and employable. Vocational and Diploma courses need to be made more attractive to facilitate specialized programs being offered to students. Incentives should be provided to teachers and researchers to make these professions more attractive for the younger generation.

4. Innovative Practices- The new technologies offer vast opportunities for progress in all walks of life. It offers opportunities for economic growth, improved health, better service delivery, improved learning and socio-cultural advances. Though efforts are required to improve the country's innovative capacity, yet the efforts should be to build on the existing strengths in light of new understanding of the research-innovation-growth linkage.

5. To mobilize resources- The decline in public funding in the last two plan periods has resulted in serious effects on standards due to increasing costs on non-salary items and emoluments of staff, on the one hand, and declining resources, on the other. Effective measures will have to be adopted to mobilize resources for higher education. There is also a need to relate the fee structure to the student's capacity to pay for the cost. So that, students at lower economic levels can be given highly subsidised and fully subsidised education.

6. Coming of Information Age- The world is entering into an Information Age and developments in communication, information and technology will open up new and cost-effective approaches for providing the reach of higher education to the youth as well as to those who need continuing education for meeting the demands of explosion of information, fast-changing nature of occupations, and lifelong education. Knowledge, which is at the heart of higher education, is a crucial resource in the development of political democracy, the struggle for social justice and progress towards individual enlightenment.

7. Student-Centered Education and Dynamic Methods- Methods of higher education also have to be appropriate to the needs of learning to learn, learning to do, learning to be and learning to become. Student-centered education and employment of dynamic methods of education will require from teachers new attitudes and new skills. Methods of teaching through lectures will have to subordinate to the methods that will lay stress on self-study, personal consultation between teachers and pupils, and dynamic sessions of seminars and workshops. Methods of distance education will have to be employed on a vast scale.

8. Public Private Partnership- PPP is most essential to bring in quality in the higher education system. Governments can ensure PPP through an appropriate policy. University Grants Commission and Ministry of HRD should play a major role in developing a purposeful interface between the Universities, Industries and National Research Laboratories (NRLs) as a step towards PPP. To achieve excellence, we thus need to create a real partnership between government, educators and industry— Partnerships that can provide our high-tech industries with skilled workers **who meet the standards of their industry.**

9. To Provide Need Based Job-Oriented Courses- All round development of personality is the purpose of education. But the present day education is neither imparting true knowledge

of life and nor improving the talent of a student by which one can achieve laurels in the field one is interested. So, combination of arts subjects, computer science, science and humanities or literature should be introduced so that such courses could be useful for the students to do jobs after recruitment in some companies which would reduce unnecessary rush to higher education.

10. International Cooperation- Universities in India have been a primary conduit for the advancement and transmission of knowledge through traditional functions such as research, innovation, teaching, human resource development, and continuing education. International cooperation is gaining importance as yet another function. With the increased development of transport and communication, the global village is witnessing a growing emphasis on international cooperation and action to find satisfactory solutions to problems that have global dimensions and higher education is one of them.

11. Towards a New vision- India realizes, like other nations of the world, that humanity stands today at the head of a new age of a large synthesis of knowledge, and that the East and the West have to collaborate in bringing about concerted action for universal upliftment, and lasting peace and unity. In this new age, great cultural achievements of the past have to be recovered and enriched in the context of the contemporary advancement so that humanity can successfully meet the evolutionary and revolutionary challenges and bring about a new type of humanity and society marked by integrated powers of physical, emotional, dynamic, intellectual, ethical, aesthetic and spiritual potentialities.

12. Cross Culture Programmes- Tour to all the places in India and world as far as possible with the cooperation of government is necessary so that one can understand about people, culture, arts, literature, religions, technological developments and progress of human society in the world.

13. Action Plan for Improving Quality- Academic and administrative audit should be conducted once in three years in colleges by external experts for ensuring quality in all aspects of academic activities. The self-finance colleges should come forward for accreditation and fulfill the requirements of accreditation. Universities and colleges should realise the need for quality education and come forward with action plan for improving quality in higher educational institutions.

14. Individuality- The life of one will not be interesting but rather boring, monotonous and frustrating. This is mainly due to parental interference in the education of the children. Parental guidance is necessary but it should not interfere in the creativity or individuality of the students. Also, in spite of the obsolete type of education system, some are achieving wonderful things in Sports, Music, Dance, Painting, Science and Technology in the world. This is only due to the encouragement of the parents and some dedicated teachers in the educational institutions. Higher education is necessary for one to achieve excellence in the line one is best.

15. Privatization of Higher Education- In any nation education is the basic necessity for the socio-economic development of the individuals and the society. In reality only 20% of

the population is educated in India. accountability (Jahan & Selvarani,2015) So, improved standard of education as first priority should be offered to the majority by the govt. authorities with sincere political will. Also, privatization of higher education is absolutely necessary in a vast country like India as government alone is helpless to do so.

16.Quality development- Quality depends on its all functions and activities: teaching and academic programs, research and scholarship, staffing, students, building, facilities, equipments, services to the community and the academic environment. The approach of doctoral research in social sciences needs to be more analytical and comparative and be related to society, policy and economy. A study conducted on Social Science Research Capacity in South Asia (2002) showed that the share of the Indian universities in the special articles published in the Economic and Political Weekly was only about a 25 percent.

17.World Class Education- Indian government is not giving priority to the development of Standard in education. India should aspire for the international standard in education. Many national universities like in the USA, UK, Australia, etc. allow studies in higher education for foreign students in their countries and through correspondence courses as well. In the same way India Universities of world class education can also offer courses of studies to foreign students taking advantage of the globalization process. To achieve that goal it should adopt uniform international syllabus in its educational institutions.

18.Personality Development- Finally, education should be for the flowering of personality but not for the suppression of creativity or natural skill. In the globalized world opportunities for the educated people are naturally ample in scope. As a result business process outsourcing (BPO) activities have increased competition in the world trade leading towards the production of quality goods and their easy availability everywhere in the world market. That is the way the world can be developed for peace, prosperity and progress by able and skilful men.

19.Status of Academic Research Studies- If we see the number of researchers engaged in Research and Development activities as compared to other countries we find that we have merely 119 researchers, whereas Japan has 5287 and US has 4484 researchers per million of population. Even in absolute terms, number of researchers in India is much smaller compared to US, China, Japan, Russia, and Germany.

20.Stipends to Research Fellows- Meritorious doctoral students should be recognized through teaching assistantships with stipends over and above the research fellowships. Identifying talented, meritorious students and encouraging them through recognition is very important to attract students into research and teaching.

21.Fair Quality Assurance System- Colleges and Private institutes should set up Internal Quality Assurance Cell and must follow a minimum standard to give degrees. The quality assurance system must be independent of political and institutional interaction and it must have a basis in the legislation. There should be operational, financial and academic autonomy coupled with accountability (Jahan & Selvarani,2015) There is a need of an independent accreditation agency with a conglomerate of government, industry, academia,

society etc. means all stakeholders of the education to ensure that the stakeholders particularly the students are not taken for a ride. They should be able to know whether a particular institution delivers value or not, then things can be under control to some extent. It is also important that all institutes of higher learning must make public the acceptability of their courses and degrees. (i.e. the status, recognition and acceptability of their courses by other institutions).

22.To increase Quantity of Universities- We need more universities because we are more in number and present number of universities is too less. On 13th June, 2005 Government of India constituted a high level advisory body known as National Knowledge Commission (NKC) to advise the PM about the state of education in India and measures needed to reform this sector. It was headed by Sam Pitroda and submitted its report in November 2007. NKC has recommended setting up of 1500 universities by 2015 so that gross enrollment ratio increases to 15 percent. It has also called for establishing an Independent Regulatory Authority for Higher Education (IRAHE) to monitor the quality of overall higher education in India.

23.Examination Reforms- Examination reforms, gradually shifting from the terminal, annual and semester examinations to regular and continuous assessment of student's performance in learning should be implemented

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

CONCLUSION

After independence, there has been tremendous increase in institutions of higher learning in all disciplines. But with the quantitative growth has it been able to attend to the core issue of quality. India is today one of the fastest developing countries of the world with the annual growth rate going above 9%. In order to sustain that rate of growth, there is need to increase the number of institutes and also the quality of higher education in India. To reach and achieve the future requirements there is an urgent need to relook at the Financial Resources, Access and Equity, Quality Standards, Relevance and at the end the Responsiveness. To attain and sustain national, regional or international quality, certain components are particularly relevant, notably careful selection of staff and continuous staff development, in particular through the promotion of appropriate programs for academic development, including teaching/learning methodology and mobility between countries, between higher education institutions and the world of work, as well as student mobility within and between countries. Internal self-evaluation and external review must be conducted openly by independent specialists, if possible with international experts.

REFERENCES

- Burns, A. (2010). Action research: What's in it for teachers and institutions? *International House Journal*, 29, 3-6.
- Diana, & Thomas, J. (2013). Developing reflective teachers with the research-based rationale. *Kappa Delta Pi Record*, 49(1), 26-29.
- Eid, F.H. (2014). Research, higher education and the quality of teaching: Inquiry in a Japanese academic context. *Research in Higher Education Journal*, 24, 1-25.
- Hoque, J. (2018). Quality concern in higher education in India. *EDULIGHT Journal*, 7(13), 662-666.
- Jahan, K.K., & Selvarani, C.D. (2015). Higher education in India: Issues and challenges. *International Conference on Humanities, Literature and Management*, 81-86. Retrived from <https://icehm.org/upload/2797ED0115098.pdf>
- Khan, B.A. (2015). Quality improvement in higher education. *International Journal of Science and Research*, 6(8), 2167-2171.
- Pandi, A.P., Rao, U.S., & Jeyathailagar, D. (2009). A study on integrated total quality management practices in technical institutions – Students' perspective. *International Journal of Educational Administration*, 1(1) 17 – 30.
- Pavel, A.P. (2012). The importance of quality in higher education in an increasingly knowledge-driven society. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 2(1), 120-127.
- Sharma, S., & Sharma, P. (2015). Indian higher education system: challenges and suggestions, *Electronic Journal for Inclusive Education*, 3(4), 3-4. Retrived from <https://corescholar.libraries.wright.edu/cgi/viewcontent.cgi?article=1179&context=ejie>
- Sharma, V. (2013). Improving quality and excellence in higher education: Evaluation of recent developments in India. *Gyan Jyoti E-Journal*, 3(2), 12-20.
- Sheikh, Y.A. (2017). Higher Education in India: challenges and opportunities. *Journal of Education and Practice*, 8(1), 39-42.
- Singh, J.D. (2011). Higher education in India-Issues, challenges and suggestions higher education. *LAMBERT Academic Publishing*, Germany. Retrived from https://www.researchgate.net/publication/282293148_Higher_Education_in_India_-_Issues_Challenges_and_Suggestions.
- Sreenivas, T., & Babu, N.S. (2015). Higher education in India – Quality perspective. *International Journal of Advanced Research Management and Social Sciences*, 4(7), 27-43. Retrived from <http://www.garph.co.uk/IJARMSS/July2015/3.pdf>
- Stewart, V. (2011). Raising teacher quality around the world. *Educational Leadership*, 68(4), 16-20.
- Tanaka, Y. (2011). Teacher education at graduate school in japan: toward the real university-based teacher education. Tokyo: Tokyo Gakugei University Press.
- Wallace, M. J. (2006). Action research for language teachers. Tenth edition. New York: Cambridge University Press.

A TEACHER AND SUSTAINABLE DEVELOPMENT THROUGH QUALITY EDUCATION.

G. Kanagamani

**“ONE CHILD, ONE TEACHER, ONE BOOK, ONE PEN CAN CHANGE THE
WORLD”. -MALALA YOUSAFZAI.**

ABSTRACT

Education is the foundation, backbone and the source of empowerment of any country. A good education system remains an inevitable tool for the overall development of country. Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient future for people and planet. The growth and development needs quality education. Providing a quality education is the foundation to creating sustainable development. Teacher of the teacher is the teacher who can transform the nation by empower the teachers and produces the future teachers as the best teachers for our nation building. Maximum responsibilities are recuperated on the shoulders of the teacher and the teacher educator. Teacher education is the mother of all education and the quality education and the quality teacher education are directly connected to the development of nation. So, it should be set right correctly and it should be improved and innovative. Our teacher education is in a need to revive and rejuvenate. In this paper we have discussed major challenges facing by teacher education and few suggestions were made to revive and rejuvenate our teacher education for sustainable development.

Keywords: Protagonist, pedagogy, sustainable development.

INTRODUCTION

“True education must correspond to the surrounding circumstances or it is not a healthy growth”—**M.K.Gandhi.**

Education is the foundation, backbone and the source of empowerment of any country. It is only education that transforms a citizen into a wholesome noble person who is an asset to the nation. Quality education enhances and empowers the citizen. A good education system remains an inevitable tool for the overall development of country.

G. Kanagamani, SG Librarian, St. Ignatius College of Education (Autonomous),
Palayamkottai, Tirunelveli-2

The standard of education determines the citizen's progress and the country's development. Every citizen of our country today endeavours for sustainable development of our nation. The growth and development needs quality education, inclusive education at all levels- primary, secondary as well as higher education, including teacher education. Teacher of the teacher is the teachers who can transform the nation by empower the teachers and produces the future teachers as the best teachers for our nation building.

SUSTAINABLE DEVELOPMENT

Economic development that is conducted without depletion of natural resources is said to be sustainable development. The UNO defines sustainable development as follows.

- Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
- Sustainable development calls for concerted efforts towards building an inclusive, sustainable and resilient future for people and planet.
- For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social inclusion and environmental protection. These elements are interconnected and all are crucial for the well-being of individuals and societies.
- Eradicating poverty in all its forms and dimensions is an indispensable requirement for sustainable development. To this end, there must be promotion of sustainable, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development.

As former UN Secretary-General Kofi Annan said: "Far from being a burden, sustainable development is an exceptional opportunity – economically, to build markets and create jobs; socially, to bring people in from the margins; and politically, to give every man and woman a voice, and a choice, in deciding their own future."

Sustainable development is often illustrated by a simple diagram showing three overlapping circles representing social, economic and environmental progress, implying the need for balancing and managing the trade-offs between them.

QUALITY EDUCATION

Now our global reputation in education is very encouraging. However Indian education has not fared well amid increasing global competition. The reasons for lack of quality education are due to lack of adequately trained teachers, poor conditions of schools and issues related to opportunities provided to rural children. Providing a quality education is the foundation to creating sustainable development

TEACHER EDUCATION

Nowadays education has become more complex and put maximum responsibilities on the shoulders of a teacher and teacher educator. Of all the hard jobs around, one of the hardest is being a good teacher. They are the society's heroes.

"Knowing yourself is the beginning of all wisdom"-Aristotle. Most of the good teachers come from good teaching learning process. But the quality of teacher education deteriorating day by day. Teacher education is the mother of all education, so it should be set right correctly and it should be improved and innovative. Our teacher education is in a need to revive and rejuvenate.

MAJOR CHALLENGES FACING TEACHER EDUCATION ARE FOLLOWS

- The growth of mushroom like substandard private teacher education institutions.
- Prevailing state of teacher education curriculum, Lack of new teaching methods.
- Status of teacher educators.
- Lack of professional standards.
- Mismatch between teacher education curriculum and the school curriculum.
- Not accessible to all.
- Lower enrolment ratio.
- Increased cost of education.
- Lack of professional ethics.
- No future objectives.
- Minimal usage of technology.
- Limited autonomous.
- Enfeeblement of professional skill development of teachers.
- Corruption in issue of accreditation, licensing and certification to the institutions.

FEW SUGGESTIONS TO REVIVE AND REJUVENATE OUR TEACHER EDUCATION

1. Strengthening the integration of B.Ed., M.Ed. courses in all aspects i.e. conceptual, theoretical and pedagogical.
2. Enhance professional competence, commitment and responsibility.
3. Use of latest researches in the field of teaching learning.
4. Lengthier internship for freshers and periodic in-service training for the educators.
5. Periodic peer assessment ought to be made compulsory.
6. IQAC acts as a dynamic system for quality enhancement and quality sustenance.

7. IQAC develop a quality system for conscious, consistent to promote overall performance of the institution.

8. AQAR (Annual Quality Assurance Report) of the institution based on the quality parameters prescribed by the accrediting agencies should be regularly submitted and uploaded in their websites.

9. SQAC (The State Quality Assurance Cell), affiliating universities, accrediting agencies shall monitor the function of IQAC.

10. To provide high quality education to the teacher community the following platforms must be utilised appropriately by the teacher educators. Open Educational Resources (OER), Massive Open Online (MOOC), SWAYAM, Future learn, Khan Academy, TED, Slide share, ISEEK, Teach Thought, Academic Search Complete, etc.

But the way we live, our teaching and learning process. our way of communication is likely to get transformed in this century tremendously because of our rapid growth in an Artificial Intelligence (AI), Robotics, Internet, Cloud, Virtual Reality, Machine Learning, Data Analytics, etc. These revolutions in information sharing and learning resources open a new path, new opportunities, and new platforms for learners and educators. Developing, deploying and integrating these new technologies into our teacher education are now picking the pace in the education arena.

CONCLUSION

The academic fraternity should put its feet forward and assume the pivotal role in realizing the seminal objective of education for harmonious living. Sustainable development can be achieved, by toning three core elements, economic growth, social inclusion and environmental protection. The quality education and the quality teacher education are directly connected to the development of nation. So, care should be taken in providing quality education to the future teachers and in the teacher learner supporters' services. Sustainable development can be successful when we focus to prepare professionally competent teacher and upgrade the standard of teacher education as per the needs of the society.

REFERENCES

- B.N.Dash , (2008). Principles of education. Neel Kamal Publications PVT.ltd, Hyderabad.
- Ismail D. Shaik Hussain (2015). Knowledge management in library science. Book enclave, Jaipur.
- Edu track Volume 15 no.6 February 2016.
- Edu track Volume 16 no.10 June 2017.
- www.vikaspedia.in

APPLYING TOTAL QUALITY MANAGEMENT IN TEACHER EDUCATION

Dr.C.Thanavathi

ABSTRACT

Quality education is a great concern in many societies across the world. In a highly competitive education sector, the success of academic institutions depends on the quality of education. Educationalists, policy makers, scholars, and researchers are showing their sincere interest towards the Total Quality Management (TQM) as it is recognized as an effective management philosophy for continuous improvement, customer satisfaction, and organizational excellence. Since this concept was initially developed in the manufacturing sector, therefore, there is a great deal of suspicion whether this philosophy is applicable in education. In this connection, this article to discuss applying total quality management in teacher education, key challenges in implementing TQM in education as well as to create an awareness regarding those challenges which may create obstacles in implementing TQM in teacher education.

Keywords: Total Quality Management (TQM), Teacher Education, Compatibility, Challenges, Continuous Improvement, Quality Culture

INTRODUCTION

Total Quality Management (TQM) is recognized as an effective management philosophy which is used as a strategy for business excellence. Although the concept of total quality management was advocated by Dr. W. Edwards Deming in the late 1950's in the USA; however, Japan was the first national who embraced this concept to recover their economy after the World War II. The success of TQM in Japan made this concept famous in many countries across the world. Originally, the concept was developed for manufacturing organizations; later on, it gained popularity to other service institutions, including bank, insurance, non-profit organizations, health care and so on. Lunenburg comments that TQM is also relevant to corporations, service organizations, universities, and elementary and secondary colleges. Now, TQM is recognized as a generic management tool and applicable to any organization.

Dr.C.Thanavathi, Assistant Professor of History, V.O.C.College of Education, Thoothukudi

According to Koslowski, in this age of intense competition, quality education is a major concern. The pressure and demand for quality education are increasing. All concerned parties of the education are actively considering implementing TQM in education because it is believed that quality education is one of the fundamental building blocks of economic development. Regarding the applicability of TQM in education, there is a serious debate since this concept was initially developed for manufacturing organizations. It is essential to resolve this problem. While conducting an initial investigation it was also revealed that there are critical challenges in implementing TQM in education. It is also imperative to explore the nature of those challenges so that academic institutions can take proper measure proactively while pursuing TQM in education.

PRINCIPLES OF TOTAL QUALITY MANAGEMENT

The concept of TQM is applicable to academics. Many educators believe that the Deming's concept of TQM provides guiding principles for needed educational reform. In his article, "The Quality Revolution in Education," John Jay Bonsting outlines the TQM principles he believes are most salient to education reform. He calls them the "Four Pillars of Total Quality Management."

SYNERGISTIC RELATIONSHIPS

According to this principle, an organization must focus, first and foremost, on its suppliers and customers. In a TQM organization, everyone is both a customer and supplier; this confusing concept emphasizes "the systematic nature of the work in which all are involved". In other words, teamwork and collaboration are essential. Traditionally, education has been prone to individual and departmental isolation. However, according to Bonstingl, this outdated practice no longer serves us: "When I close the classroom door, those kids are mine!" is a notion too narrow to survive in a world in which teamwork and collaboration result in high-quality benefits for the greatest number of people. The very application of the first pillar of TQM to education emphasizes the synergistic relationship between the "suppliers" and "customers". The concept of synergy suggests that performance and production is enhanced by pooling the talent and experience of individuals.

In a classroom, teacher-student teams are the equivalent of industry's front-line workers. The product of their successful work together is the development of the student's capabilities, interests, and character. In one sense, the student is the teacher's customer, as the recipient of educational services provided for the student's growth and improvement. Viewed in this way, the teacher and the college are suppliers of effective learning tools,

environments, and systems to the student, who is the college's primary customer. The college is responsible for providing for the long-term educational welfare of students by teaching them how to learn and communicate in high-quality ways, how to access quality in their own work and in that of others, and how to invest in their own lifelong and life-wide learning processes by maximizing opportunities for growth in every aspect of daily life. In another sense, the student is also a worker, whose product is essentially his or her own continuous improvement and personal growth.

CONTINUOUS IMPROVEMENT AND SELF EVALUATION

The second pillar of TQM applied to education is the total dedication to continuous improvement, personally and collectively. Within a Total Quality college setting, administrators work collaboratively with their customers: teachers. Gone are the vestiges of "Scientific management"... whose watchwords were compliance, control and command. The foundations for this system were fear, intimidation, and an adversarial approach to problem-solving. Today it is in our best interest to encourage everyone's potential by dedicating ourselves to the continual improvement of our own abilities and those of the people with whom we work and live. Total Quality is, essentially, a win-win approach which works to everyone's ultimate advantage. According to Deming, no human being should ever evaluate another human being. Therefore, TQM emphasizes self-evaluation as part of a continuous improvement process. In addition, this principle also laminates to the focusing on students' strengths, individual learning styles, and different types of intelligences.

A SYSTEM OF ONGOING PROCESS

The third pillar of TQM as applied in academics is the recognition of the organization as a system and the work done within the organization must be seen as an ongoing process. The primary implication of this principle is that individual students and teachers are less to blame for failure than the system in which they work. Quality speaks to working on the system, which must be examined to identify and eliminate the flawed processes that allow its participants to fail. Since systems are made up of processes, the improvements made in the quality of those processes largely determine the quality of the resulting product. In the new paradigm of learning, continual improvement of learning processes based on learning outcomes replaces the outdated "teach and test" mode.

LEADERSHIP

The fourth TQM principle applied to education is that the success of TQM is the responsibility of top management. The college teachers must establish the context in which students can best achieve their potential through the continuous improvement that results from teachers and students working together. Teachers who emphasize content area literacy and principle-centered teaching provide the leadership, framework, and tools necessary for continuous improvement in the learning process.

ACCORDING TO THE PRACTICAL EVIDENCES, THE TQM PRINCIPLES HELP THE COLLEGES IN FOLLOWING CLAUSES:

- (a) Redefine the role, purpose and responsibilities of colleges.
- (b) Improve colleges as a “way of life.”
- (c) Plan comprehensive leadership training for educators at all levels.
- (d) Create staff development that addresses the attitudes and beliefs of college staff.
- (e) Use research and practice-based information to guide both policy and practice.
- (f) Design comprehensive child-development initiatives that cut across a variety of agencies and institutions.

TOTAL QUALITY MANAGEMENT (TQM) IN TEACHER EDUCATION INSTITUTIONS

It is well known that the quality and extent of learner achievements are determined primarily by teacher competence, sensitivity and teacher motivation. The National Council for Teacher Education has defined teacher education as –A programme of education, research and training of persons to teach from pre-primary to higher education level. Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges of the teaching field. Teacher Education institutes plays a vital role in improving system of education by preparing competent and effective teachers. We know that the quality of nation is depends upon the quality of its citizens and the quality citizens are mostly determined by their educational system of the nation, which in turn is decided by the quality of teachers it has. After independence, efforts have been made for expansion and qualitative improvement of teacher education. For the qualitative improvement of education in general and teacher’s education in particular various committees and commissions were formed.

Among the commissions, the Kothari Commission (1964-65), which dealt extensively with all aspects of education, is worthy of mention. It said, “A sound program of

professional education of teachers is essential for the quality improvement of education.” “Unfortunately, the professional education of teachers has been neglected in the postindependence period”. In their opinion, “quality of training institutes remains, with a few exceptions, either mediocre poor”. Preparation of qualified and able teachings personnel is one of the most significant functions of all teacher education institutions. The quality of teacher education would largely depend upon the effectiveness of teacher education institutions. Quality of teacher education is an integral part of the quality of education system. Teacher education institutions have a greater responsibility in producing quality teachers. The Education Commissions (1964-66), popularly known as the Kothari Commission, devoted one complete chapter to teacher education and detailed various recommendations for the improvement of its quality. It emphasized that the essence of teacher education is “quality” and in its absence, teacher education becomes not only a financial waste but also a source of overall deterioration on educational standards.

NEED FOR TQM IN TEACHER EDUCATION

To fulfill and achieve the objectives formulated for teacher education, there is a need for the quality improvement in teacher education institutions. The need for Total Quality Management in teacher Education arises on account of following:

- 1) Increasing number of students
- 2) Increasing competition due to privatization of education and access to education through internet.
- 3) Lack of commitment among faculty and staff of these institutions.
- 4) Lack of systematic internal monitoring and review procedure.
- 5) Lack of accountability.
- 6) Limited resources.
- 7) Lack of pupil teachers’ capabilities

There is a lack of efficiency, effectiveness and quality of teacher education institutions hence TQM approach should be there in teacher education institutions to improve the effectiveness and quality of these institutions

STEPS FOR IMPLEMENTING TQM IN TEACHER EDUCATION

There are certain steps with which TQM can be implemented in teacher education institutions. Each step requires agreement of the faculty members who must implement it and the administrators who must provide the necessary resources.

- 1) Faculty members and administrators define the knowledge, skills, and values that graduates of the program should have.
- 2) With the assistance of experts in pedagogy and learning assessment, the faculty defines the instructional methods most likely to lead to the acquisition of the desired attributes,

selects the methods needed to assess the effectiveness of the instruction, and estimates the resources (including provisions for faculty development) needed to implement both the instruction and the assessment.

3) The administration commits to provide both the necessary resources to initiate and sustain the program and appropriate incentives for faculty members to participate.

4) The faculty and administration formulate a detailed implementation plan.

5) The faculty implements the plan. 6) The faculty and administration assess the results and modify the plan as necessary to move closer to the desired outcomes

CONCLUSION

In order to achieve the above as opportunities to the academic scenario, in addition to patience, participatory management among well-trained and educated partners is crucial to the success of TQM in education; everyone involved must understand and believe in principles. Some personnel who are committed to the principles can facilitate success with TQM. Their vision and skills in leadership, management, interpersonal communication, problem solving and creative cooperation are important qualities for successful implementation of TQM.

REFERENCES

- Escrig, A.B. (2004). TQM as a Competitive Factor: A Theoretical and Empirical Analysis. *International Journal of Quality and Reliability Management*, 21, 612-637. <https://doi.org/10.1108/02656710410542034>
- Goetsch, D.L. and Davis, S. (1994). *Introduction to Total Quality: Quality, Productivity, Competitiveness*. New York: Macmillan College Publishing Co.,
- Kumar, V., Choise, F., Grosbois, D. and Kumar, U. (2009). Impact of TQM on Company's Performance. *International Journal of Quality and Reliability Management*, 26, 23-37. <https://doi.org/10.1108/02656710910924152>
- Oakland, J. (2003). *Total Quality Management: Text with Cases*. Oxford: Elsevier, Butterworth Heinemann.
- Thanavathi, C. (2012). *Teacher Education*. Thoothukudi: Perumal Publications.
- Thanavathi, C. (2018). *Teacher Education in India: Secondary Level*. Salem: Samyukdha Publications.
- Thanavathi, C., (2017). *Advanced Educational Research and Statistics*. Salem: Samyukdha Publications.

- Vinni, R. (2011). Total Quality Management and Paradigms of Public Administration. *International Public Review*, 8, 15-23.
- Witcher, B.J. (1990). Total Marketing: Total Quality and Marketing Concept. *The Quarterly Review of Marketing* (Winter), 12, 55-61.

EXPLORING PERSONALITY AND REALITIES

D.Vimala

ABSTRACT

Personality described in terms of an individual's behaviour his action, posture, words, and attitude and opinions regarding his external world and also individual's covers feelings his external world and one's feelings about himself, may be conscious, pre-conscious or unconscious level. Personality means man with in the man. Freud, Jung, Adler, Rogers, Horney, & Maslow all believed childhood experience was a fundamental determiner of adult personality. Reality is the sum or aggregate of all that is real or existent, as opposed to that which is merely imaginary. The term is also used to refer to the ontological status of things, indicating their existence. In physical terms, reality is the totality of the universe, known and unknown.

INTRODUCTION

Explore is a verb that means "to travel in or through." You might explore an island, a European city, or the rooms of an unfamiliar house. The Latin root of explore is explorare, meaning "investigate or search out." Whenever you delve into something, or investigate it, you explore it. Personality refers to individual differences in characteristic patterns of thinking, feeling and behaving. The study of personality focuses on two broad areas: One is understanding individual differences in particular personality characteristics, such as sociability or irritability.

TYPE OF PERSONALITY

Based on characteristics, there are two types of personality, i.e. introvert and extrovert. When a person is reserved and does not open up easily, he or she is said to be an introvert. On the contrary, when a person is social, talkative and makes friends quickly, then his personality type is extrovert. These people (a.k.a., the vast majority of us) are called ambiverts, who have both introverted and extroverted tendencies

D.Vimala, I.M.Ed, St. Ignatius college of education, Palayamkottai.

STRONG PERSONALITY

A strong personality usually accompanies good or at least quick decision making abilities, not too worried about what others think of them, not afraid to say something controversial if they believe in what they are saying. Strong personality probably means different things to different people.

PERSONALITY THEORY

A personality theory is an attempt at explaining behaviour, including how different types of behaviour arise and which patterns can be observed. Most, though not all, theories will fall into one of four types: psychoanalytic, humanistic, trait, and social cognitive. Psychoanalytic.

- Extroversion-Introversion (EI): how you get your energy and where you prefer to focus your attention
- *Sensing-Intuition (SN)*: how you take in information about the world around you
- *Thinking-Feeling (TF)*: how you like to make decisions
- *Judging-Perceiving (JP)*: how you prefer to organize your life

WORK STYLES

O*NET Online provides an online tool that helps you to review your personal characteristics and how they can affect how well one performs a job. This tool is available via the Work Styles search function on O*NET Online. You can browse O*Net data by clicking on the quality that you think best represents you including achievement, innovation, and leadership to explore the different jobs that will require the specific characteristic.

SKILLS

In addition to personality, skills are also important to consider in the career development process. If you lived and worked in colonial times in the United States, what skills would you need to be gainfully employed? What kind of person would your employer want you to be? And how would your skills and aptitudes be then, compared to today? Many industries that developed during the 1600s–1700s, such as health care, publishing, manufacturing, construction, finance, and farming, are still with us today. And the professional abilities, aptitudes, and values required in those industries are many of the same ones employers seek

today. Most personality trait designations are oversimplified. In reality, people exist on a spectrum. These assessments are just designed to help you figure out what works and doesn't work for you and your lifestyle.

CHARACTERISTICS OF PERSONALITY

- Personality is something which is unique in each individual.
- Personality refers particularly to the persistent qualities of an individual.
- Personality represents a dynamic orientation of an organism to the environment.
- Personality is greatly influenced by social interactions.
- Personality represents a unique organization of persistent dynamic and social predisposition.
- Consistency.
- Psychological and physiological.
- It impacts behaviours and actions.
- Multiple expressions.

FACTORS OF PERSONALITY

- Environmental Factors.
- Physical Factors.
- Situational Factors.
- Hereditary.
- Family and Social Factors.
- Identification Process.
- Cultural Factors.
- Intelligence.
- Sex Differences.
- Psychological Factors.

OCCUPATIONAL THEMES

Holland defined six categories of people based on personality, interests, and skills:

1. **Realistic:** These people describe themselves as honest, loyal, and practical. They are doers more than thinkers. They have strong mechanical, motor, and athletic abilities; like the outdoors; and prefer working with machines, tools, plants, and animals.
2. **Investigative:** These people love problem solving and analytical skills. They are intellectually stimulated and often mathematically or scientifically inclined; like to observe, learn, and evaluate; prefer working alone; and are reserved.
3. **Artistic:** These people are the "free spirits." They are creative, emotional, intuitive, and idealistic; have a flair for communicating ideas; dislike structure and prefer working independently; and like to sing, write, act, paint, and think creatively. They are similar to the investigative type but are interested in the artistic and aesthetic aspects of things more than the scientific.
4. **Social:** These are "people" people. They are friendly and outgoing; love to help others, make a difference, or both; have strong verbal and personal skills and teaching abilities; and are less likely to engage in intellectual or physical activity.
5. **Enterprising:** These people are confident, assertive risk takers. They are sociable; enjoy speaking and leadership; like to persuade rather than guide; like to use their influence; have strong interpersonal skills; and are status conscious.
6. **Conventional:** These people are dependable, detail oriented, disciplined, precise, persistent, and practical; value order; and are good at clerical and numerical tasks. They work well with people and data, so they are good organizers, schedulers, and project managers.

REALITY- Reality is the state of things as they actually exist, as opposed to an idealistic or notional idea of them. Reality includes everything that is and has been, whether or not it is observable or comprehensible. A still broader definition includes that which has existed, exists, or will exist.

EXPLORING REALITY- The Intertwining of Science & Religion is a book by John Polkinghorne which offers a "progress report" on his "search for truth. All my life I have been trying to explore reality. That exploration includes science, but it also necessarily takes me beyond it. The process of investigation has a spiral character, as tackling the issues

draws the explorer inwards towards a deeper engagement with the multidimensional character of reality".

EXPLORING REALITIES OF FOOD SECURITY

Traditional approaches of food security largely draw from neoliberal prescriptions, which focus on supply side issues of improving productivity and efficiency through market mechanisms. Reflections on the oral accounts of 30 migrants from eastern India to the capital city of Gujarat, India, provide two important insights regarding food security related issues. First, in terms of the lived realities of these migrants, traditional approaches of food security are inadequate to address their concerns as they exacerbate their food related vulnerabilities. Second, economic democracy and food sovereignty approaches are more helpful in addressing food related vulnerabilities as these approaches engage more comprehensively with the multidimensional socioeconomic vulnerabilities of the migrants from the perspective of equity and justice.

EXPLORING ALL OF YOURSELF

Coly Vulpiani developed Parallel Realities Practice as a means of experiencing the integration of various aspects of the human personality with the unique spirituality of each person. The method combines meditation—which is employed to cultivate stillness and awareness—with Coly's facilitation and exploration of the various aspects of your personality in order to bring more conscious choice, compassion, and clarity to daily life. Parallel Realities Practice is not a philosophy. It is a potent psycho-spiritual tool that is quickly learned and deeply experienced as a tangible and physical truth that shifts your perspective, and, in doing so, transforms your life in powerful yet gentle ways. Parallel Realities Practice integrates the awareness that human nature and your original nature create a rich unity of the material and spiritual worlds in your everyday life. In this practice, you will identify and appreciate all parts of the Self and recognize that every part has its own perspective and energy, and that a complex layering of conditioning and belief has created the reality that has existed for you until now. It then becomes possible to consciously shift into a dialogue between the more dominant aspects of your personality and the new mastery found in that larger and wiser part of you. This connection to a higher-self gives you the ability to embrace the paradoxical realities of your life without judgment, and to develop a

conscious internal choice-maker who can be called into action more often in order to provide you with greater clarity.

Shifting perspectives can change your reality, and it is possible for this expansive change to happen almost effortlessly as you use the tools and techniques provided in individual sessions and workshops to consciously choose this new direction in your life.

EXPLORING GLOBAL REALITY

This module introduces some of the major issues – the global realities – that need to be addressed in building a sustainable future. As such, it serves as a foundation for the more in-depth studies in following modules. It also highlights the interdependence of these issues and how our daily lives, as inhabitants of the world, are related to social, economic and environmental processes. The module demonstrates that changes to the way resources are used are possible, that social and environmental problems can be solved, and that we have the collective capacity to overcome the many problems we face.

CONCLUSION

Few personality types are as colourful and charming as Adventurers. Known for their kindness and artistic skills, Adventurers are great at finding exciting new things to explore and experience. Individual differences in personality are universal in that they are found in all human populations. The roots of individual differences are no doubt bedded in evolutionary history, selected because of their improved adaptiveness to conditions in the environment. The specific personality qualities of an individual, which lead to individual differences between people, are not based so much in evolution, however, but are the product of many developmental factors.

REFERENCES

- .Muniswamy. M(2007).Educational Psychology and Evaluation, S.M.V.Publication Doddapet Kolar.
- .[http://en.m.Wikipedia.org](http://en.m.wikipedia.org).
- <http://www.Cubiks.Com>.
- www.Parellelrealitiespractice.com.

REFORMING EDUCATION THROUGH TECHNOLOGY : A ROADMAP FOR FUTURE

Dr. Ananth Babu

ABSTRACT

Education has the most profound impact on the growth of a nation and also how the society evolves and the values it upholds. It is an era of digital transformation with rapid changes happening at a great pace. As a part of education, along with leadership and vision as well as building the capacity of teachers and the Millennials, creating the right learning infrastructure is equally important. Access to technology can facilitate and empower the educators to build 21st century skills, which are around critical thinking, problem solving, attention to detail, collaboration and teamwork among several others. Technology is a powerful tool that can support and transform education in many ways, from making it easier for teachers to create instructional materials to enabling new ways for people to learn and work together. With the worldwide reach of the Internet and the ubiquity of smart devices that can connect to it, a new age of anytime anywhere education is dawning. It will be up to instructional designers and educational technologies to make the most of the opportunities provided by technology to change education so that effective and efficient education is available to everyone everywhere. Technology can assist with these expectations and make teachers and their students more successful. Technology-Enhanced Learning is important for many reasons. It is not only important because it is the standard of education that is expected today, but it can also improve education. Technology Enabled Program supports education of children from impoverished families of Government and Government aided schools by providing in-house designed video- based education aids .

Keywords: Instructional Materials ,The Ubiquity ,Impoverished Families ,Technology-Enhanced Learning

INTRODUCTION

. Today's world is a world of information explosion. This information explosion is taking place in such a fast speed that even a literate person is feeling as if he or she is illiterate being not able to cope up with such an information explosion. Technology enterprises have led to a fast catching cultural change in higher education

Dr. Ananth Babu, Assistant Professor of History, St. Johns College of Education.
Palayamkottai-627002

Previously, formal education met its end at a certain point in an individual's life. Today, there is no age bar to learning. Learners of all backgrounds and age brackets today are inspired towards higher and specialized learning with their focus on appropriate pedagogy for e-learning, convenient online availability of teachers to guide and mentor them and online assessments and certifications from some of the most reputable institutions of the country. Smart Technology is enabling teachers and students to engage more proactively. Learners have access to content from across the globe that's accredited to renowned institutions. Encouraged investors in this sector have recognized education as an industry by making smart education more inclusive and technologically advanced.

TECHNOLOGY IN EDUCATION

With the advent of the smart education concept in India, technology and access to the internet has created a learning environment which has increased participation across smaller cities and encouraged learning among all sections of society. Stepping forward into a paperless world of online learning, education technology enterprises of today are making the heavy textbooks of yesteryear's academic institutions redundant. The significant investments made in technological research and developments have proven to provide higher returns and be more effective than mere textbooks in the long run.

Today, the concept of virtual Integrated Learning is being lauded by knowledge seekers and providers alike with exponentially growing participation. The focus on appropriate pedagogy for e-learning through the availability of online courses and mentors will help to bridge the chasm between potential learners and quality education. The rapid evolution of educational technologies also makes it increasingly challenging to determine what works best. Longitudinal research that takes years to do risks being irrelevant by the time it is completed because of shifts in the technological landscape. The iPad, for instance, became popular in schools soon after it was released and well before any research could be conducted about its educational effectiveness.

A GLIMPSE ON TECHNOLOGY BASED EDUCATION

WIFI TECHNOLOGY & INTERNET:Schools can use Wifi internet to enhance students learning abilities. This internet can be accessed for free across the campus, so this will enable the student to learn individually while using their laptops or tablets. Students use internet for research and educational purposes. So making internet accessible anywhere on the school campus will be a good use of technology in schools.

CELL PHONES-Mobile Learning has become so popular amongst college students, many of these students own smart cell phones which have big storage and they can also access internet, many of these students read e-books , listen to educational podcast, watch educational videos, complete field work using these smart cell phones.

SMART WHITE BOARDS-Schools are replacing the black and white black board with a digital smart white boards. Teachers have found these smart white boards more flexible and students tend to learn better when a smart board is used in the classroom. Most of these smart boards can access internet and they also have storage space where teachers can save their work for later usage. Also students can use these smart boards to explain points to their fellow students while in the classroom. Many times students learn better when their fellow student teaches them.

VIRTUAL REALITY - With VR technology becoming more accessible and affordable, innovative post-secondary institutions are now turning to VR, integrated with mobile learning to create digital learning scenes for immersive learning opportunities and to enhance students' understanding of complex subject matter.

ONLINE TUTORING -The global tutoring market is growing. Advancements in technologies, including the incorporation of artificial intelligence, are now making it increasingly possible for students to seek and receive virtual tutoring assistance at the point of need.

GAMIFICATION -Games empower learners, enrich learning experiences and boost learner engagement in course material.

SOCIAL NETWORKING AND BLOGS-This is a new type of free technology used by most advanced schools. Teachers and students both use educational social networks like **Piazza.com**, **epals.com** to connect to other educators and fellow students. Also teachers use free blog hosting services like **Blogger.com** and **WordPress.org** to create free classroom blogs. On these blogs, teachers can post classroom notes, assignments, and they can also list down-loadable e-books to help their students during research.

AUDIO FILES PODCAST-Schools can take advantage of providing educational material in form of audio so that students can download them via the school network and listen to them any where.

TABLETS-Schools can provide these portable tablets to their teachers to simplify their job. Tablets are a quite expensive, but they are better than laptops. A teacher can use a tablet and Blue-tooth technology to derive data to a white board in the classroom.

MIMIO VOTE-The Mimio Vote is an assessment system which can help teachers easily measure their students understanding capacity. This tool can help teachers track students progress through instant feedback and scores tallied over time. The tool is user friendly; teachers can download students' results in a spreadsheet for clear achievement records.

ROADMAP FOR FUTURE-The future roadmap of technology based education depends on a speed of broadband penetration, availability of web-enabled and mobile compatible learning content and maturity of consumers in accepting the digital format of education. As far as former is concerned, the Government seems to be moving speedily enough in creating the requisite infrastructure as soon as possible, whereas for the latter, students in urban areas have already undergone the initial phase of exposure to digital format of education and are now wiser to choose the right content to supplement the offline classroom based teaching learning. The big opportunity lies in rural areas wherein the digital format can bring in big gains. On the other hand, one major outcome of digital education would be increased collaboration between learners in all segments. Self-paced and on-demand learning would also gain further momentum in future.

CONCLUSION

Schools, colleges, and universities should be incubators of exploration and invention. Educators should be collaborators in learning, seeking new knowledge and constantly acquiring new skills alongside their students. Education leaders should set a vision for creating learning experiences that provide the right tools and supports for all learners to thrive. This all is made more likely with the guidance of strong vision and leadership at all levels from teacher-leaders to school, district, and state administrators. For these roles, too, technology allows greater communication, resource sharing, and improved practice so that the vision is owned by all and dedicated to helping every individual in the system improve learning for students.

REFERENCES

- Anderson, T., & Elloumi, F. (Eds.). (2004). The theory and practice of online learning. Athabasca, AB, Canada: Athabasca University Press.
- Bauer, J., & Kenton, J. (2005). Toward technology integration in the schools: Why it isn't happening. *Journal of Technology and Teacher Education*, 13(4), 519–546.
- Payne, L (1987). "Computer-managed instruction: an alternative teaching strategy". *J Nurs Educ.* 26 (1): 30–6. PMID 3029349
- Seels, B. B., & Richey, R. C. (1994). *Instructional technology: The definition and domains of the field*. Washington, DC: AECT.
- Selwyn, N. (2011) *Education and Technology: Key Issues and Debates*. London: Continuum International Publishing Group.
- Clark, R. C., Mayer, R. E. (2007). *eLearning and the Science of Instruction*. San Francisco: Pfeiffer. ISBN 978-0787986834
- <https://www.useoftechnology.com/technology-for-schools/>

EDUCATION FOR THE 21ST CENTURY: ROLE OF ICT

Ms. P. AjiUdhaya

ABSTRACT

In today's scenario, the young generation has entered a world which has changed in all spheres: scientific and technological, political, economic, social and cultural. Among the parents and learners there is an expectancy that all teachers especially science teachers should be able to effectually use a variety of information communication technology (ICT) associated resources in the science classroom in order to boost learning. The education system can be revolutionized by incorporating ICT tools with traditional education systems.

Keywords: ICT, science, education, change, digital, learners,

INTRODUCTION:

Today, in this second decade of the twenty first century, we find ourselves in an entirely different scientific, technological and socio-political context at the global level. According to the changes in the world, the education system has also to be changed by incorporating information and communication technology with it. The Science education is highlighted because science involves lot of practical activities. It consists of observation, measurement, communication, discussion, investigation, handling, watching, monitoring and recording the results. Then again, science is equally a theoretical subject. It comprises thinking, inferring and having good ideas, hypothesizing, theorizing, simulating and modelling. ICT can aid as much in this aspect of science and in same way they do in practical aspect. In the interim science teachers had better use ICT along with their professional skills during lesson to exploit its potential. There are ranges of software tools available for science education such as Interactive White Board, Simulations, Data logging, Spreadsheets, Word processing, Virtual Learning Environment, Desktop Publication etc.

EDUCATION FOR 21ST CENTURY

No education system can be frozen in time. If it is to endure to deliver quality, it must continually adapt to change the educational needs and to change in the world it serves.

Ms. P. AjiUdhaya, Assistant Professor, Department of Physics, Holy Cross College
(Autonomous), Nagercoil.

Also, if we need education to contribute to the future of sustainable democratic society; change is needed. It is significant to scrutinize whether the changes have positive or negative consequence and to regulate how they need to be accommodated.

GLEICHER'S FORMULA

Gleicher's formula helps us to realize the variables we need to take account of when looking at the readiness for change:

$$C = (ABD) > X$$

Where, C is change,

A is the status of dissatisfaction,

B is a desired clear state,

D is practical steps to the desired state, and

X is the cost of the change.

The level of dissatisfaction with the status (A) is without doubt high if we care to listen to what parents, learners, employers and the wider public often say about education. This paper recommends a structured overview and argumentative line, attempting to place the detailed concerns of all those involved in the day-to-day practice of education into an overall picture that makes sense (B) and specifies practical steps towards the desired state (D). Taken together we are safe to assume that A, B and D have reached a level which easily outweighs X (the cost of change, including the resistance to change).

NEEDS TO MEET 21STCENTURY LEARNERS

21stcentury learners are digital learners as they have developed what is called a "cultural brain" one defined by the ability to process massive amounts of primarily, visual and textual information at rapid speed due to their constant exposure to the digital bombardment that is their everyday experience. Student brains are different than those of their teachers, administrators, parents and employers most of whom graduated before the digital age. To harness their current gifts, gifts deemed necessary to compete in the global economy, we must change how we educate on every level. Frank Kelly says "We cannot carry on preparing students for the farms and factories of yesterday while the world jumps to light speed with biotechnology, nanotechnology, neuro-technology, global high speed wired and wireless networks, and incredibly powerful personal portable devices. Schools must prepare

kids for the world of tomorrow – the world where they will spend the rest of their lives” for this there is a need for educational institutions to remain in sync with the world around them and the learners within them. Students need to be involved in real, relevant experiences that recognize how they learn.

TEACHERS FOR STUDENTS OF 21ST CENTURY LEARNERS

Within a learning environment characterized by trust and rapport, teachers adopt varying “stances” given the needs of the learner at that moment in time. The teacher takes on the stances of

INSTRUCTING: This is where explicit teaching is required. The teacher is focusing on curriculum content, knowledge and skills.

COLLABORATING: Facilitating students working together, face to face or over distances, recognizing the norms of collaboration among various cultures, engaging in collaborative inquiry, on projects that have meaning for the learner.

COACHING: The teacher is supporting the student as the driver of his or her learning. This includes goal setting, problem-solving, practice and self-directed learning.

MONITORING: This is the ongoing formative assessment that the teacher engages in order to determine what the student needs and thus whether there is a need to alter his or her stance. Based upon established success criteria, students engage in peer assessment and frequent feedback from the teacher. Teachers ensure high expectations for all and create conditions that ensure time on task.

TEACHING THE 21ST CENTURY LEARNERS: A report called; The Future of Learning Institutions in a Digital Age outlines the principles of:

- ❖ Self-Learning
- ❖ Horizontal Structures of Learning
- ❖ Movement from Presumed Authority
- ❖ Networked Learning
- ❖ Lifelong Learning

SELF-LEARNING: Online learning (whether formal or informal) promotes the use of skills such as discovery, browsing, scanning, hyper-texting and threading; collaborating and

engaging in multiple voices. Digital learners prefer active, engaged learning. This is a significant contrast to the passive learning strategies, such as lectures.

HORIZONTAL STRUCTURES OF LEARNING: It is believed that learning strategy shifts from memorizing information to how to find reliable sources, from learning formulas to learning how, from focus on content to focus on process. Digital learners prefer random access to hyperlinked multimedia information. This promotes co-learning and investigation.

MOVING FROM PRESUMED AUTHORITY: It tackles the concept that there is no single authority on a subject. This is a shift to interdisciplinary and collaborative “knowledge creating” and collaborative learning environments in order to address research problems that are multidimensional and complex when the resolution cannot be found through any single discipline. Skills needed include taking turns in speaking, posing questions, listening to and hearing others out.

NETWORKED LEARNING: It includes engaging in courageous conversations and working together to create short-term solutions when straightforward solutions to problems or learning challenges are not forthcoming. These emphasize the importance of a “collaborative, knowledge-making impulse in humans who are willing to contribute, correct and collect information without remuneration.”

HOW MUCH THE STUDENTS UNDERSTANDING OF SCIENCE IS IMPROVED BY USING ICT?

ICT is just the learning tool just it does not ensure learning. The most important is ‘application skills; which advances students understanding. Operational skills cannot be disregarded, but teachers should make certain that this should not dominate over application skills. For the science teacher, significant feature of application skill exists in the investment in task design, target setting and intervention approaches.

An expectant view is that laboratories and classrooms should continue to be places where people meet and exchange ideas. Social interaction, discussion and ‘hands-on’ activity are dynamic aspects of the educative progression that are incompetently satisfied by the solitude of individual computer use. Computers should not be allowed to shift essential intellectual exchanges among people but should be used in ways that intensify and balance them. Thus, it is important to identify and understand both the benefits and the shortcomings of individual ICT tools, so that judgements about aptness for persistence can be made at

every phase of scheduling. The preparation of students for a task, the explanation of task objectives and the nature of teacher interventions all subsidize to the quality of the outcomes. These factors need to be stood in mind as we consider the probable impact of some of the innovations.

ICT is renovating all aspects of society: its institutions, commerce, industry, home life and education. In education, there is a growing guess that using computers is a 'great thing'; after all, the response of many students seems to be predominantly one of high motivation. There is, however, a certain risk that the educational motivation for ICT becomes outshone by the glamour and progress of the hardware and software technology. Certainly, technological developments will continue to invite thinking about new prospects for teaching and learning, but it is very much cooler to engage with the new technology than to seek a deep understanding of its insinuations for education. It is vital, that pedagogy and technology are equal partners in the advance process. In precise, innovations should not be driven by technology for its own sake. As guardians of pedagogy, teachers have a momentous role in influencing the use of ICT for learning. The upcoming success of ICT in science rests on the eminence of thought given to its use, with a clear emphasis on learning outcomes.

ROLES OF ICT USE IN SCIENCE EDUCATION YEAR WISE

Computers helped education in countless ways from their launch. In the 1980s the usage of computers in education was typically classified based on the type of interaction, technological and pedagogical use. Also, a lot of money is spent in number of countries for educational software production. This software's were used, for training skills or learning scientific terms. In the 1990s, the use of ICT was increasingly investigated from a pedagogical point of view and ICT use was divided into IT aided learning, tool application and computer science. In the first case ICT is used as an agent for interaction in number of ways. In the second case the computer is a tool. In the third case is devoted for computer science outlooks. In the 2000s the computers were used in education for basic word processing, data manipulation for analyzing and reporting assessment results, interactive applets and simulations, electronic portfolios and self-paced online modules, web sites for students and teachers, and electronic textbooks. And in the 21st century, the education is guided by learning management systems and virtual lab. In the learning management systems, any teacher can use ICT tools for content delivery and assessment to engage

students anywhere anytime. Virtual lab provides remote-access to Labs in various disciplines of Science and Engineering. Modern IT systems both hardware and software are good at

- Collecting and storing large amounts of data
- Performing complex calculations on stored data
- Rapidly processing large amount of data and
- Displaying it in variety of ways helping to present and communicate ideas.

CONCLUSION:

We are not living in an era of change, but in a change of eras. It is human nature to both wonder and worry about the future. But it is evident that the future is uncertain and that our world and our students are changing. Significant change does not happen overnight and must be considered in a planned, purposeful and strategic way. As a result, there is a compelling need to respond in a thoughtful and practical way. For that Educators and students need to work together to redefine education and envision what education and educational systems could be. We need to explore together. We need to imagine the possibilities. The future is not certain but the need for change is. What we know is that this new definition of education involves co-learning and co-creating. We must teach skills to prepare students for their future worlds even though we cannot define what this world might look like. Research and common sense tell us we need learn from our learners.

REFERENCES

- 'Teacher manifesto for the 21st century of the conference the professional image and ethos of teachers', Council of Europe, Strasbourg April 2014.
- 'Education for a changing world', Green paper on Education, Stationary office, Dublin, 2015.
- 'Science education for responsible citizenship', Report prepared by European commission of expert group, 2015.
- <https://www.ukessays.com/essays/education/the-role-of-ict-in-secondary-science-education-education-essay.php>
- 'Information communication technology (ICT) integration in a science education unit for pre service science teachers; students' perceptions of their ICT skills, knowledge and pedagogy', VailleDawsonj, Patricia Forster and Doug Reid, International Journal of Science and Mathematics Education 4: 345-363, 2006.

- 'Integrating ICT in the Teaching of Science in Secondary Schools', Laurence Rogers, University of Leicester and Helen Finlayson, Proceedings of the International Conference on Computers in Education, 2002.
- The Role of ICT in Science Education, Angela McFarlane and Silvestra Sakellariou, Cambridge Journal of Education, 32;2, 220-224, 2015.

FACTORS AFFECTING QUALITY ASSURANCE IN DIGITAL EDUCATION

Dr.A.Michael John

Mr. R.Ramkumar

ABSTRACT

The learning process which employs teaching methodologies and aids that benefit the learners by enhancing knowledge, abilities and skills they require in this digital age is known as digital education. This digital education platform provides opportunities for students to design their customized and flexible path while assuring the accomplishment of learning outcomes. Digital education makes the content for presentation more flexible than the traditional classroom based environment by making use of online information sources, which could make a two hour boring lecture into a twenty minute heaven. But the effectiveness of these methodology and aids purely depends on the quality it holds and the target audience. Every institution must possess its own policy for quality assurance, which is made public and forms part of their strategic management. It is the utmost duty of internal stakeholders to develop and implement quality assurance policy through suitable processes and structures in collaboration with external stakeholders. This paper focuses on the various factors affecting quality assurance in digital education.

Keywords-Digital education, learning process, presentation, teaching methodologies, online information, policy for quality assurance, strategic management, stakeholders, education system, digitalization, modern devices, interaction, applications, technology.

Introduction

With the advent of Internet, mobile phones, mobile apps, tablets, laptops, and other modern devices, every aspect of learning is getting digitalized in this modern world. The education in India's metropolitan and other cities has reached a great extent, paving way for digitalization.

Dr.A.Michael John, Director & Research supervisor, Xavier Institute of Business Administration XIBA, St Xavier's College (Autonomous), Palayamkottai, Tirunelveli - 627002

Mr. Ramkumar. R, Assistant Professor & Research Scholar, Department of Business Administration, St Xavier's College (Autonomous), Palayamkottai, Tirunelveli - 627002

Through a number of International schools coming up, digital education is making its way into the education system of India and is replacing the place of the traditional classroom training which focuses more on taking notes, writing assignments, memorization. But it's no more chalk and talk in most schools as classroom teaching has become more interactive and interesting with the use of digital training aids such as PPTs, practical demonstration, E-Learning, video presentation, and other digital training platforms.

IMPORTANCE-Children of this modern age are growing up in a different world than that of their parents. They are born into a technology driven world and they know to access internet at an early age. Mobile phones, computers, Face book, Whatsapp are inevitable in their daily lives. Technologies not only mean entertainment, and watching videos through YouTube, there is a lot more than that. The benefit of technology is dependent on the way we use it. The technology when used for educational purposes will open doors for enormous opportunities and create meaningful learning experiences by boosting creativity and innovation through various digital platforms.

FACTORS AFFECTING QUALITY ASSURANCE

INTERACTION-With the arrival of digital teaching learning methods, education has become more fun and interactive. The listening span could be increased as children tend to be attentive while using digital platforms. Learning becomes more effective as they are not only listening but viewing it on the screen. In this audios and visuals go hand in hand which makes it easier for the child to grasp. As educational contents are fed through digital screens, students pay more attention to the content and this helps them to complete the activities on their own.

INFRASTRUCTURE-Having digital education means, students need to have a proper infrastructure such as smart devices, computers with broadband connections, not only at schools but also at homes. Either the students must be affordable to have at least one smart devices or the digital education providing institution must provide it for their children. As all the students of a particular institution may not be from the same financial background, sufficient care must be taken by the managements to ensure, whether sufficient technological help is dissipated to every student. If this is not ensured, it will be hard to make the educational contents available at students' hands.

TECHNICAL SUPPORT-It is impossible to anticipate the technical problems that may occur while delivering the educational content, but it is not difficult to provide the technical supports. A number of protocols and procedures are already available to reduce or avoid downtime and helping students who access these learning technologies for the first time. From a quality perspective, making the delivery of content right through various digital mediums and providing a learning experience that is devoid of any kind of technical problems should be the goal of institutions providing digital education.

LEARNING-The acquisitions of knowledge through study, experience, demonstration need a number of skills to be possessed by the students when they start learning using digital platforms. The digital learning setup employs both individual and team learning. But students will feel that most of their efforts are being directed towards managing the teams rather than on learning and its outcomes in the initial stages, which could be solved with proper assistance of any form which they can expect from their teachers. Digital learning on the other hand provides opportunities for teachers to create learning activities, aids, and environments so students will be expected to accommodate to it.

QUALITY OF TEACHING AND TEACHERS-In early days there was a belief that learning involving digital devices will contribute to huge expenses and create a reduction in the need for teacher involvement in delivering the knowledge. But the advent of digital education has resulted in an opposite outcome. Teachers of this modern age view their role in this learning environment requires high degree of involvement. With this involvement they feel the need for skills and abilities that is not likely to develop from traditional teaching methods. For instance, the various terminologies employed in management could be presented using a words filled PPT or through a PPT involving the popular connection game with pictures, where students think of the term using the pictures and hints available on the screen. There are a number of ways in which particular competency of a teacher could help to ensure quality learning experience.

THE RISE OF APPLICATIONS- Applications offer a superior learning experience. A number of applications including Byjus - the learning app, Facebook, Whatsapp, Chat bots have transformed learning into a fun making activity and a pathway for constructive community development through which group learning is becoming more effective. These applications compete largely on the quality of learning experience they offer to its consumer, the way they manage and display information. The information available through these

applications may be same as others but the experience they provide differs. The consumer can quickly and easily switch from one app to another in seconds, without disruption.

CONCLUSION

The process of implementation and the quality of the facilitation provided by the management providing digital education play significant roles in students' perceptions of the quality of their learning experience. These factors are independent of the course themselves for which least planning and development are provided. Institutions looking to develop their expertise and capability in digital and E learning would do well to ensure that with the main focus on ensuring quality is achieved as per their quality policy.

REFERENCES

- <https://opentextbc.ca/teachinginadigitalage/chapter/11-1-what-do-we-mean-by-quality-when-teaching-in-a-digital-age/>
- <http://acrobatiq.com/5-factors-influencing-design-in-digital-education-in-2014/>
- <https://www.mapsofindia.com/my-india/india/digital-education-in-india-and-classroom-teaching-advantages-and-disadvantages>
- <https://dergipark.org.tr/en/download/article-file/268201>

EFFECT OF VIDEOS FROM SOCIAL MEDIA ON EDUCATIONAL PSYCHOLOGY ACHIEVEMENT BETWEEN BIOLOGICAL SCIENCE AND HISTORY B.Ed TEACHER TRAINEES

Dr.A.Pushpavalli

ABSTRACT

Psychology gives education the theory of individual differences that every student has different mental ability and learn with different pace. Teacher educators have returned about the purpose, aims and goals of educational psychology and have stressed the relevance of the field for the practices of teaching and learning. Educational psychology will be easy to all if students are interested. To create interest within the students, videos are used in teaching. Videos help to keep learning information clearly in mind. The main purpose of the study is to enhance the achievement in educational psychology of B.Ed teacher trainees with the help of social media. In order to enhance the educational psychology achievement by improving the memory of the students with the help of YouTube videos, this study is undertaken. From B.Ed. college, 40 biological science and history B.Ed teacher trainees were selected. They were separated into control group and experimental group. Intervention was given to the experimental group. Before giving intervention, pre test was conducted to both groups. After giving intervention, post test was conducted to both groups. Teacher trainees of experimental group are highly improved than control group due to intervention given. When compared to Biological science and history B.Ed teacher trainees, Biological science B.Ed teacher trainees are slightly improved than history B.Ed teacher trainees.

Keywords: Social media, Educational psychology, Biological science, Experimental group

INTRODUCTION

Social media helps faculty to provide good examples and understanding regarding visual. It has a positive role in providing news update to students (Fezlielsik, 2013). Video is prominent in social media trends and is very effective in communicating a message. Media can be used in almost any discipline to enhance learning, both in class and also out of class assignment. Short film and television clips, written articles and blog posting can be viewed to enforce concepts and spark discussion. Visual media helps students to retain concepts and ideas. (Willingham's, 2019)

Dr.A.Pushpavalli, Principal, Swaminathan saraswathi college of education for women, Salem.

YOUTUBE VIDEOS: YouTube is a website designed for sharing videos. YouTube videos are used for classroom lectures. There is a connection between visual clues, the memory process and the recall of new knowledge,(shepard and cooper,1982).

Memory is mind's store house and the reservoir of accumulated learning. To the Roman statesman Cicero, memory was "the treasury and guardian of all things". To a psychologist, memory is any indication that learning has persisted over time.(Raj Bapna, 2000)

Psychology is the study of the human mind and its functions, especially those affecting behaviour in a given context. It is the mental characteristics or attitude of a person or group.

Educational psychology is the branch of psychology concerned with the scientific study of human learning.

SIGNIFICANCE:

YouTube EDU is a sub-section of YouTube that provides access to more than 500,000 educational videos from organizations like Stanford University, PBS, TED, Khan Academy, Steve Spangler Science and Numberphile. Videos are grouped for primary and secondary education, university and life-long learning with categories reflecting academic disciplines (philosophy, etc.). Educational psychology helps a teacher who develops a student's personality, to adjust methodologies of learning to the nature of learner, to know the problems of individual differences and treat every student on their merit and how to solve the learning problems of students.

PRESENT STUDY : Psychology has changed the spirit of education and it gives new meaning to learning in the classroom. Psychology also changed the old concept of education where only the upper class had the ability and right to learn. Educational psychology will be easy to all if students are interested. To create interest within the students, videos are used in teaching. Videos help to keep learning information clearly in mind. The main purpose of the study is to enhance the achievement in educational psychology of B.Ed teacher trainees with the help of social media. In order to enhance the educational psychology achievement by improving the memory of the students with the help of YouTube videos, this study is undertaken.

OBJECTIVE

To find out the relationship between the educational psychology achievement and memory of the B.Ed teacher trainees with the help of videos with respect to optional subject.

HYPOTHESES

- Biological science and History B.Ed teacher trainees do not differ in the pretest of educational psychology achievement.
- Biological science and History B.Ed teacher trainees do not differ in the post test of educational psychology achievement
- Biological science and History B.Ed teacher trainees do not differ in the pretest of memory quotient.
- Biological science and History B.Ed teacher trainees do not differ in the post test of memory quotient.

Population: Population or universe means, the entire mass of observations, which is the parent group from which a sample is to be formed, (Saxena, 2008). In this study population refers to all Biological science or History B.Ed teacher trainees who study educational psychology as one of the subject.

Sample: In this study sample refers to 40 Biological Physical science or History B.Ed teacher trainees who study educational psychology subject from swaminathan saraswathi college of education for women, salem.

Experimental Design: Experimental design is the blueprint of the procedures that enable the research to test hypotheses by reaching valid conclusions about relationships between independent and dependent variables, the type of variables to be manipulated, and the conditions or limiting factor under which it is conducted. [John W.Best, James V.Khan 2006]. In many experimental designs, the researcher has selected true experimental design.

VARIABLES

Dependent Variable-In this study educational psychology and Memory are the dependent variables.

Independent Variable-The variable which is manipulated by the experimenter is called independent variable. It is often called the treatment, experiment or antecedent variable [Lokesh Koul, 2008]. In this study videos from you tube, google and chrome are the independent variables.

INSTRUMENTATION

1. Achievement Test 2. Wechsler Memory Scale

Phases of Experiment Table:1

Experiment phase	Activity	Duration
Phase-1	Pre Assessment	1 month
Phase-2	Intervention	2 month each
Group-1	No intervention	2 months
Group-2	videos	2 months
Phase-3	Post Assessment	1 month

However the total duration for the interaction program is 4 months.

INTERVENTION- Videos from youtube, google and chrome.

Analysis and Interpretation: Null Hypothesis: Biological science and History B.Ed teacher trainees of control group do not differ in educational psychology achievement and memory quotient in pre and post test.

TABLE:2 “t”-test for significant difference between Biological science and History B.Ed teacher trainees of control group in educational psychology achievement and memory quotient in pre and post test.

Control Group	SUBJECTS		OPTIONAL		Calculate d “t” Value	Remarks
	Biological science		History			
	Mean	S.D	Mean	S.D		
Achievement in educational psychology pre test	62.54	2.23	56.20	2.72	5.561	Significant
Achievement in educational psychology post test	63.18	4.28	57.00	4.79	2.957	Significant
Memory Quotient pre test	64.45	4.68	58.80	3.09	3.054	Significant
Memory Quotient post test	65.09	8.42	59.30	4.24	3.966	Significant

At 0.05% level the table value is 2.10

Since the calculated “t” value is greater than the table value the null hypotheses is rejected at 0.05% level with regard to pre and post test of educational psychology achievement and memory quotient. In control group, Biological science and History B.Ed teacher trainees differ significantly in pre and post test of educational psychology achievement and memory quotient.

Null Hypothesis: Biological science and History B.Ed teacher trainees of experimental group do not differ in educational psychology achievement and memory quotient in pre and post test.

TABLE:3 “t”-test for significant difference between Biological science and History B.Ed teacher trainees of experimental group in educational psychology achievement and memory quotient in pre and post test.

Experimental Group	OPTIONAL				Calculated “t” Value	Remarks
	SUBJECTS					
	Biological science		History			
	Mean	S.D	Mean	SD		
Achievement in educational psychology pre test	65.36	3.02	59.80	2.36	4.413	Significant
Achievement in educational psychology post test	94.45	1.78	88.9	4.11	3.854	Significant
Memory Quotient pre test	64.36	2.84	58.50	2.62	4.614	Significant
Memory Quotient post test	94.36	3.49	88.60	4.29	3.200	Significant

At 0.05% level the table value is 2.10

Since the calculated “t” value is greater than the table value, the null hypothesis are rejected at 0.05% level with regard to pre and post test of educational psychology achievement and memory quotient. In experimental group, Biological science and History B.Ed teacher trainees differ significantly in pre and post test of educational psychology achievement and memory quotient

FINDINGS

1. Biological science and History B.Ed teacher trainees differ in the pre test of educational psychology achievement.
2. Biological science and History B.Ed teacher trainees differ in the post test of educational psychology achievement.
3. Biological science and History B.Ed teacher trainees differ in the pre test of memory quotient.
4. Biological science and History B.Ed teacher trainees differ in the post test of memory quotient.

CONCLUSION

In control group, the memory enhancement of achievement in educational psychology is not improved due to there is no application of videos. In experimental group, the memory enhancement of achievement in educational psychology is improved due to there is application of videos. When compared to Biological science and History B.Ed teacher trainees: Both Biological science and History B.Ed teacher trainees are improved in educational psychology achievement and memory, but Biological science B.Ed teacher trainees are improved slightly higher than History B.Ed teacher trainees. The reason may be Biological science B.Ed teacher trainees easily understand learning information than History B.Ed teacher trainees.

EDUCATIONAL IMPLICATION

The teacher's responsibility is to encourage the learners to acquire and to retain the knowledge imported in school for future use in meeting life problems. But to our great surprise we find that students forget most of the learning after a short lapse of time. The basic question is, why do we forget? We will examine the causes of forgetting and the various techniques which can be used by class room teachers to minimize the percentage of forgetting and to make the process of acquisition of knowledge more efficient and lasting for the students. This common view has been recently challenged by experimental psychologists. Forgetting is an inevitable commitment of learning. Thus failure to learn is one of the most common reasons why students are unable to recall answers to examination questions. Lectures are often forgotten by the students. Attention level is not the same while students listening the lecture. Videos create a more engaging sensory experience than using

print materials alone. It increase knowledge retention. It greatly assist in learning of psychology. It increase students learning.

REFERENCES

- John W. Best James V. Khan (2006). Research in Education, ninth edition published by Dorling kindersely (India) Pvt Ltd. License of pearson education in South Asia, Kothari C.R. (2004). Research methodology methods and Techniques, second revised editor published by new age international publishers New Delhi – 110 002.
- Lokes koul (2008). Methodology of Educational Research Third Revised Editor. Vikas ® publishing house pvt ltd noida (up).
- Meenakshi Sundaram. Advanced Educational Psychology.
- Raj Bapna (2000). Raj bapana's mind power study techniques, mahima multicolouyr Pvt ltd, Udaipur.
- Saxana N.R(2008) Fundamental of Educational Research. Vinay Rakhaja Publication.

PROFESSIONAL ETHICS AND RESPONSIBILITIES OF A TEACHER

Dr.G.Amutha Ranjini

ABSTRACT

Any code of professional ethics for teachers should be valid for all teachers regardless of their position in the hierarchy of the organisation, the school or education service. In this paper professional ethics stick with professional guidance for teachers, they are facing or challenging classroom events or problems. Professional responsibilities of a teacher are insisting with responsibility to the Students, community, Student's Family, Parents and with colleagues. The teacher shall recognize his duty to manifest responsibility, individual initiative, and integrity in his teaching and other professional actions within guidelines laid down for the profession.

INTRODUCTION

The professional educator strives to create a learning environment that nurtures to fulfillment the potential of all students. The professional educator acts with conscientious effort to exemplify the highest ethical standards. The professional educator responsibly accepts that every child has a right to an uninterrupted education free from strikes or any other work stoppage tactics. Any code of professional ethics for teachers should be valid for all teachers regardless of their position in the hierarchy of the organisation, the school or education service. It may be, however, that certain aspects will apply to heads of department more than others because of the nature of the responsibilities they carry and their management functions within the school.

PROFESSIONAL GUIDANCE FOR TEACHERS

- Teachers should not degrade their colleagues in the presence of third parties or should a teacher adversely criticise a colleague in the presence of others save in the context of appropriate procedures.
 - All teachers should observe confidentiality in respect of any discussions with other individual teachers about their professional problems and difficulties.
-

Dr.G.Amutha Ranjini, Assistant Professor of Bio-Science, V.O.C.College of Education, Thoothukudi-628001

- Teachers should not degrade their colleagues in the presence of third parties or should a teacher adversely criticise a colleague in the presence of others save in the context of appropriate procedures.
- Teachers should be able to express freely their considered professional opinions while recognising the responsibilities borne by colleagues.
- Teachers with responsibility for the organisation of the work of other colleagues should ensure that all members of staff have knowledge and a clear understanding of the duties and responsibilities, they are allocated and practices relevant to the day to day operation of the school.
- If changes are to be made in the organisation of a school on a short or a long term basis, they should be preceded by consultation with the teachers concerned and there should be clear and adequate information supplied to the teachers before their implementation.
- Parents making complaints or allegations concerning teachers should be referred to the head teacher. The head teachers should take no action concerning the complaint or allegation until there has been consultation with the teacher concerned.
- All members of staff should be able to make full use of the staff facilities, including staff rooms and study rooms.
- Teachers have access to confidential information which may be provided by any one of, or combination of a number of resources. Reports on children are received from parents, social workers, educational welfare officers, police, local authority officers, teachers, doctors and medical officers of health and others. Teachers must use their professional judgment regarding the confidentiality of such information, bearing in mind the requirements of the law and the best interests of the children. The head teacher or a senior official of the local education authority should be consulted before decisions are taken concerning the divulgence of confidential information.
- Teachers should ensure that they maintain the delicate balance between taking a close interest in the welfare of pupils and the avoidance of entering into discussions about the conduct, competence or efficiency of other teachers.
- The growth of a friendly relationship between teacher and pupil which is based on mutual respect and recognition of the role that each plays in the learning situation is desirable.
- No teacher should delegate to an unqualified person duties or functions requiring the professional knowledge and skill of a qualified teacher.

- A teacher should not deliberately behave in such a way as to bring his or her school in disrepute.
- A teacher should not behave in a racially discriminatory manner or make racist remarks directed towards or about ethnic minority groups or members thereof.

PROFESSIONAL RESPONSIBILITIES

As public servants, teachers hold special positions of trust, especially regarding children and young adults in our community, and must be accountable for their actions at all times.

1. RESPONSIBILITY TO THE STUDENT

- Recognize, respect and uphold the dignity and worth of students as individual human beings, and, therefore, deal justly and considerately with students;
- Engage students in the pursuit of truth, knowledge and wisdom and provide access to all points of view without deliberate distortion of content area matter;
- Nurture in students lifelong respect and compassion for themselves and other human beings regardless of race, ethnic origin, gender, social class, disability, religion, or sexual orientation;
- Foster in students the full understanding, application and preservation of democratic principles and process;
- Guide students to acquire the requisite skills and understanding for participatory citizenship and to realize their obligation to be worthy and contributing members of society;
- Assist students in the formulation of worthy, positive goals;
- Promote the right and freedom of students to learn, explore ideas, develop critical thinking, problemsolving, and necessary learning skills to acquire the ;
- Remain steadfast in guaranteeing equal opportunity for quality education for all students;
- Maintain the confidentiality of information concerning students obtained in the proper course of the educational process, and dispense such information only when prescribed or directed by federal or state law or professional practice;
- Create an emotionally and physically safe and healthy learning environment for all students; and
- Apply discipline promptly, impartially, appropriately and with compassion.

2. RESPONSIBILITY TO THE COMMUNITY-Encourage the community to exercise its responsibility to be involved in the formulation of educational policy; promote the principles and ideals of democratic citizenship; and endeavour to secure equal educational opportunities for all students.

3. RESPONSIBILITY TO THE STUDENT'S FAMILY-The professional educator respect the dignity of each family, its culture, customs, and beliefs; promote, respond, and maintain appropriate communications with the family, staff and administration; consider the family's concerns and perspectives on issues involving its children; and encourage participation of the family in the educational process.

4. RESPONSIBILITIES TO THE PARENTS-The teacher shall recognize the right of a parent to consult him, through proper channels, on the welfare or progress of a pupil. The teacher shall recognize the right of a parent to be consulted about any matter which concerns the future development of his child. Make every effort to encourage parents to interest themselves actively in the education and welfare of their children.

5. RESPONSIBILITIES WITH COLLEAGUES - Respect the professional standing and opinions of his colleagues and shall maintain in his relations with them the highest standards of professional courtesy. The teacher shall be prepared to help in all possible ways junior colleagues and those in training. The teacher shall accept the authority of senior professional colleagues while retaining the right to express professional opinion, own actions and judgments. The teacher shall recognize his duty to manifest responsibility, individual initiative, and integrity in his teaching and other professional actions within guidelines laid down for the profession.

CONCLUSION

Ethical behaviour is not just a matter of following the letter of the law or sticking to the obligations of the Code. Teachers should also act within the spirit of the law and the Code. The appearance of unethical behaviour can be just as damaging to public confidence in the profession as unethical conduct itself.

REFERENCES

- Aggarwal, T.C. (1980). *Teacher and education in a developing society*. New Delhi: Vikas Publishing House.
- Bhartia, R.L., & Ahuja, B.N. (1993). *Modern Indian Education and in its Problems*, Surjeet Publications.
- Biwas & Aggarwal. (1998). *Encyclopedic Dictionary and Directory of Education*. New Delhi – 5: The Academic Publishers.
- Hameed, A. & Thahira, K. K., (2010). Emotional Maturity and Social Adjustment of Student Teachers. *Edutracks*, November 2010, Vol. 10(3), P.29-31.
- Mohanasundaram, K., & Williams. R. C. (2007). *Information and Communication Technology in Education*. Tiruchirappalli: Grace Educational Prints.

ABSTRACT

The learning process is one in which the student acts alone, even if physically he or she is with others. Studying by reading in one's own room or office is the prototypical example of learning by oneself. Learning is a process within a social context, in which more than one person may be present. In this article discuss about some of the important factors which may affect the learning process. It has been found out that the pupil's difficulty in learning may be due to many factors within the child himself. In the school and at the home, the conditions for learning must be favorable and adequate if teaching is to produce the desired results. It cannot be denied that the type and quality of instructional materials and equipment play an important part in the instructional efficiency of the school. It is difficult to do a good job of teaching in a poor type of building and without adequate equipment and instructional materials. A school building or a classroom has no merit when built without due regard to its educational objectives and functions.

Keywords: Learning Process, Instructional Materials And Instructional Efficiency.

INTRODUCTION

The learning process is one in which the student acts alone, even if physically he or she is with others. Studying by reading in one's own room or office is the prototypical example of learning by oneself. Learning is a process within a social context, in which more than one person may be present.

Some of the important factors which may affect the learning process are as follows:

It has been found out that the pupil's difficulty in learning may be due to many factors within the child himself.

1. INTELLECTUAL FACTOR

The term refers to the individual mental level. Success in school is generally closely related to level of the intellect. Pupils with low intelligence often encounter serious difficulty in mastering school work.

Sometimes pupils do not learn because of special intellectual disabilities. A low score in one subject and his scores in other subjects indicate the possible presence of a special deficiency. Psychology reveals to use that an individual possess different kinds to intelligence. Knowledge of the nature of the pupil's intellect is of considerable value in the guidance and the diagnosis of disability. The native capacity of the individual is of prime importance in determining the effectiveness of the, learning process.

2. LEARNING FACTORS

Factors owing to lack of mastery of what has been taught, faulty methods of work or study, and narrowness of experimental background may affect the learning process of any pupil. If the school proceeds too rapidly and does not constantly check up on the extent to which the pupil is mastering what is being taught, the pupil accumulates a number of deficiencies that interfere with successful progress .In arithmetic, for instance, knowledge of basic addition is essential to successful work in multiplication. Weakness in addition will contribute directly to the deficiency in multiplication. Likewise, failure in history may be due to low reading ability or weakness in English. Similarly, because of faulty instruction, the pupil may have learned inefficient methods of study. Many other kinds of difficulty which are directly related to learning factors may interfere with progress.

3. PHYSICAL FACTORS

Under this group are included such factors as health, physical development, nutrition, visual and physical defects, and glandular abnormality. It is generally recognized that ill health retards physical and motor development, and malnutrition interferes with learning and physical growth. Children suffering from visual, auditory, and other physical defects are seriously handicapped in developing skills such as reading and spelling. It has been demonstrated that various glands of internal secretion, such as the thyroid and pituitary glands, affect behavior. The health of the learner will likely affect his ability to learn and his power to concentrate.

4. MENTAL FACTORS

Attitude falls under mental factors attitudes are made up of organic and kinesthetic elements. They are not to be confused with emotions that are characterized by internal visceral disturbances. Attitudes are more or less of definite sort. They play a large part in the mental organization and general behavior of the individual. Attitudes are also important in the development of personality. Among these attitudes aw interest, cheerfulness, affection, prejudice, -open mindedness, and loyalty. Attitudes exercise a stimulating effect upon the rate of learning and teaching and upon the progress in school. The efficiency of the work

from day to day and the rapidity with which it is achieved are influenced by the attitude of the learner. A favorable mental attitude facilitates learning. The factor of interest is very closely related in nature to that of symbolic drive and reward.

5. EMOTIONAL AND SOCIAL FACTORS

Personal factors, such as instincts and emotions, and social factors, such as cooperation and rivalry, are directly related to a complex psychology of motivation. It is a recognized fact that the various responses of the individual to various kinds of stimuli are determined by a wide variety of tendencies. Some of these innate tendencies are constructive and others are harmful. For some reason a pupil may have developed a dislike for some subject because he may fail to see its value, or may lack foundation. This dislike results in a bad emotional state. Some pupils are in a continuing state of unhappiness because of their fear of being victims of the disapproval of their teachers and classmates. This is an unwholesome attitude and affects the learning process to a considerable degree. This is oftentimes the result of bad training. Social discontent springs from the knowledge or delusion that one is below others in welfare.

6. TEACHER'S PERSONALITY

The teacher as an individual personality is an important element in the learning environment or in the failures and success of the learner. The way in which his personality interacts with the personalities of the pupils being taught helps to determine the kind of behavior which emerges from the learning situation. The supreme value of a teacher is not in the regular performance of routine duties, but in his power to lead and to inspire his pupils through the influence of his moral personality and example. Strictly speaking, personality is made up of all the factors that make the individual what he is, the complex pattern of characteristics that distinguishes him from the others of his kind. Personality is the product of many integrating forces. In other words, an individual's personality is a composite of his physical appearance, his mental capacity, his emotional behavior, and his attitudes towards others. Effective teaching and learning are the results of an integrated personality of the teacher.

Generally speaking, pupils do not like a grouchy teacher who cannot control his temper before the class. It is impossible for a teacher with a temper to create enthusiasm and to radiate light and sunshine to those about him. Pupils love a happy, sympathetic, enthusiastic, and cheerful teacher. Effective teaching and learning are the results of love for the pupils, sympathy for their interests, tolerance, and a definite capacity for understanding.

The teacher must therefore recognize that in all his activities in the classroom he is directly affecting the behavior of the growing and learning organism.

7. MOVEMENT

Our body's senses provide a continuous stream of data to the brain, which we use to make decisions about the environment around us. The thoughts we produce will be expressed back through the very same senses we used to collect information from in the first place: speaking, creating music, or typing on a computer to record our thoughts. When your hands are active, your brain is more engaged. Therefore, "hands-on" learning — drawing, playing games, acting out an experience — activates the brain. The brain needs movement to keep it focused on the task of learning.

8. REPETITION

A famous study on retention of textbook materials compared the percentage of material remembered after different intervals of time. The results:

Time Interval	% Remembered	% Forgotten
After 1 day	54%	46%
After 7 days	35%	65%
After 14 days	21%	79%
After 21 days	18%	82%
After 28 days	19%	81%
After 63 days	17%	83%

In another study on recall after listening to a lecture, students forgot more than 90% of the material after 14 days! Remembering what you've heard in lectures is even more difficult, because you're not able to slow down, pause, or reflect on what you've heard. Lecturing does not provide for effective training. This is why when becoming a marketing major, it's crucial to get in the field experience to solidify that knowledge. If lots of time passes without using, students are at risk of losing their hard earned knowledge all together. To overcome the natural "fading" effect of short-term memory, you must recall and repeat what you want to remember. With each repetition, the brain moves the information into longer term portions of memory, so repetition is definitely one of the factors that influence

learning. The process of recalling over increasing intervals of time is called spaced repetition. People with different IQs have similar spaced repetition recall patterns. For example, if you learn a foreign word, you will need to repeat it within 10 minutes, then 24 hours, and again within 5-7 days to ensure 95% retention. And then again, 25-30 days later and again within six months. After a few repetitions like this, you are on your way to storing information for recall for years.

9. FEEDBACK

Feedback is one of the critical factors that influence learning and is also the main factor in creating controlled procedures. The learning loop and PDCA discusses feedback as the primary driver of improvement. People are more likely to continue what they are doing if they receive positive feedback. Conversely, too much negative feedback will cause people to stop. When learning a new task, people need constant positive reinforcement to overcome the failures introduced along the path of learning.

10. STRESS AND EMOTIONS

Stress caused by some type of physical or emotional trauma produces a hormone called cortisol that disrupts the connections between brain cells in the learning and memory part of the brain. Too much stress literally “shuts down” the brain and stops the learning process cold. Emotions are just as critical to learning. They influence our attention, meaning, and memory. If we are angry, sad, upset, worried, or silly, what do we think our learning performance would be? Now compare that to being happy, energetic, enthusiastic, or serious. People perform better when they are happier so performance in class discussions, tests, or exercises improves. Stress and emotions are factors that influence learning both positively and negatively, depending on the level of stress or emotion encountered.

CONCLUSION

In the school and at the home, the conditions for learning must be favorable and adequate if teaching is to produce the desired results. It cannot be denied that the type and quality of instructional materials and equipment play an important part in the instructional efficiency of the school. It is difficult to do a good job of teaching in a poor type of building and without adequate equipment and instructional materials. A school building or a classroom has no merit when built without due regard to its educational objectives and functions.

REFERENCES

- ÅgeDiseth, (2011). Self-efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement, *Learning and Individual Differences Science Direct*, 191-195.
- Aggarwal, J. C. (2003). Child Development and Process of Learning. *Shipra Publications, Shakarpur, Delhi*,
- Aggarwal, J.C., (2004) Psychology of learning and Development, Shirra Publications, New Delhi.
- Aggarwal, Suresh and Suman Yadav, (2013). Learning style performance of prospective teacher with regard to their gender and stream. *BRICS of Educational and Research*, Jan-march 3 (1), 30-34 ISSN 2231-5829.
- Maaïke Koopman, (2011). Learning processes of students in prevocational secondary education: Achievement goal orientations and academic well-being across the transition to upper secondary. *Learning and Individual Differences, Science Direct*, 21, 426-431.
- Thanavathi, C. (2018). *Teacher Education in India: Secondary Level*. Salem: Samyukdha Publications.

OVERVIEW ON INCLUSIVE EDUCATION

A.Shenbaga Sangeetha

V.Varalakshmi

ABSTRACT

Inclusive education refers to an academic system that allows special education students to become included in mainstream classes along side their peers. Benefits of inclusive education include an opportunity for special needs students to learn team work skills, while heightening their sense of belonging in the school community. This paper reviews some of the barriers to the development of successful inclusive schools and suggests that one way of overcoming these difficulties is to reconsider the roles and responsibilities of school teachers in inclusive education and also provides some suggestions to be acted out well.

Keywords: Inclusive Education, Role Of Teacher, Academic System, Special Education

INTRODUCTION

Inclusive education has been defined in various ways that address the learning needs of the differently able children. In 1947, the centrally sponsored scheme for Integrated Education for disabled children (IEDC) was introduced to provide equal opportunities to children with disabilities in general schools and facilitate their retention. This paper shows that teachers in inclusive settings collaborate more and spend more time planning, learn new techniques from one another, participate in more professional development activities, show a greater willingness to change and use a wider range of creative strategies to meet students' needs. All school-going children, whether they are disabled or not, have the right to education as they are the future citizens of the country.

MEANING

Inclusive Education is an approach to educating students with special educational needs. Under the inclusion model, students with special needs spend most or all of their practices in the school. Most frequently, they are used for selected students with mild to serve special needs.

A.Shenbaga Sangeetha , B.Ed., Student, Sri Ram Nallamani Yadava College of Education, Tenkasi.

V.Varalakshmi , B.Ed., Student, Sri Ram Nallamani Yadava College of Education, Tenkasi.

Fully inclusive schools, which are rare no longer, distinguish between “general education” and “Special education” programs; instead the school is restricted so that all students learn together.

DEFINITION

Inclusive Education can be defined as the process of increasing the participation of students in the culture, curricula and communities of local mainstream schools.

OBJECTIVES OF INCLUSIVE EDUCATION

- ❖ To facilitate access of disabled students from rural and remote area.
- ❖ To emphasize job-teaching and job-oriented vocational training.
- ❖ To promote an understanding of the paradigm shift from charity to development.

NEED AND IMPORTANCE OF INCLUSIVE EDUCATION

Inclusive education has been effort internationally to include children with disabilities in the educational mainstream. In order to achieve truly inclusive education, we need to think about and incorporate children with special needs in to regular schools. Because these kids face some sorts of barriers to learning and participation in the classroom. As general education classroom include more and more diverse students, teachers realize the value of accepting each students, as unique. In effective inclusive programs, teachers adapt activities to include all students, even though their individual goals may be different. We have learned that inclusive education is a better way to help all students succeed. Researchers show that most students learn and perform better when exposed to the richness of the general education curriculum. The growing body of research has shown that children do better academically when in inclusive setting and Inclusion provides opportunities to develop relationships some of benefits include: Friendship, social skills, personal principles, comfort level with people who have special needs and caring classroom environments.

ELEMENTS OF INCLUSIVE EDUCATION

1. USE TO TEACHING ASSISTANTS FOR SPECIALISTS

This staffs have the potential to be inclusive or divisive. For instance, a specialist who helps teacher address the needs of all students is working inclusively. A specialist who pulls students out of class to work with them individually on a regular basis is not.

2. INCLUSIVE CURRICULUM

An inclusive curriculum includes locally relevant themes and contributions by marginalized and minority groups. It avoids binary narratives of good and bad and allows adapting curriculum to the learning styles of children with special education needs.

3. PARENTAL INVOLVEMENT

Most schools strive for some level of parental involvement, but it is often limited to emails home and occasional parent teacher conferences. In diverse school system, inclusion means thinking about multiple ways to reach out to parents on their own terms.

UNDERSTANDING OF INCLUSIVE EDUCATION

Inclusive Education (IE) is often defined as a journey away from the kind of segregation where children with particular difficulties have been put together with other children whose needs are similar.

DIFFERENCE BETWEEN INTEGRATED AND INCLUSIVE EDUCATION

Integrated Education	Inclusive Education
Can have their own criteria of Integrating students with some disability or ability.	Do not have their own criteria of Including students as main is to include all the students who are excluded from education.
Not very expensive as inclusive education.	Can be more expensive as special planning is done for infrastructure, curriculum and trained staff is appointed.
Regular curriculum is also followed by challenged students with generally same school training.	Special curriculum is designed and followed for challenged students with may be less school timing or accord to need.
Challenge or gifted students in any way are occupied in some normal class rooms.	Special classroom are designed or students are given special seating arrangement according to their need.

CHALLENGE OF INCLUSIVE EDUCATION

Support higher and vocational proper of the existing reservation quota in all educational institutions and creation of barrier free learning environment.

STRATEGIES

Ensuring physical access for young persons with disabilities in all colleges and education institutions. Facilitate college/vocational education for young persons with disability through proper implementations of existing reservation quota and provision of support for education material are during examinations.

BARRIERS IN INCLUSIVE EDUCATION

- Inferiority complex
- Lack of understanding
- Adjustment problem
- Isolated segregated
- Feeling of extra burden
- Insecurity
- Lack of expression
- Introvert nature
- Shyness

ROLE OF TEACHER

- Interaction with family
- to solve their problem
- To develop new learning strategies
- to develop self confidence
- to provide special facilities
- to look after their personal needs
- to recognize their hidden talents
- to inculcate positive attitude in the able –bodies children

MERITS OF INCLUSIVE EDUCATION

Students with disabilities have the opportunity for

- experiencing full citizenship in school and the community
- forming a wide circle of friends
- experiencing academic challenges
- enjoying the satisfaction of achievements

- learning to rely more on friends than teacher
- taking new risk
- finding they can master activities
- they may not have tried in special classes.

CONCLUSION

Right to education act 2009 ensures education to all children irrespective of their caste, religion ability and so on. It is essential to build an inclusive approach. Inclusion is more than a method of educating students with disabilities. A good inclusive education is one that allows all the students participate in all aspects of classroom arose as a good solution to the question of how to educate these children more effectively.

REFERENCES

- Meenakshi Sundaram (2016). Creating on Inclusive School, Kavyamala Publication.
- <https://inclusiveeducation.com>
- <https://www.specialeducationguide.com>
- <https://www.unassignment.com>
- <https://www.understandingspecialeducation.com>
- www.theinclusiveclass.com

ENHANCEMENT IN QUALITY OF LEARNING USING VOICE RECOGNITION TECHNOLOGY

Mr.C.A. James
Dr. R. Vijaya
DR. M. Rajeshkumar

ABSTRACT

Student's involvement in education will be understood by their attention, motivation and passion for learning which they reveal during their course of study. Their curiosity is extended to lead the learners for progressive learning. Voice recognition products use the voice as the interface between the learner and the computer and engage them. Students talk to a computer and watch his spoken words quickly appear in texts and virtual medium. Voice recognition software is faster and interactive. It assists the learners to focus on the content of the learning material. As a result, voice recognition tool can generate a new excitement to create effective learning environment in an extended interest to keep them engaged. The objective of this paper is to explain the effect of voice recognition technology in the learning environment as a quality enhancing tool. It shows the importance of Voice Recognition Technology(VRT) to draw the attention of the learner who is away from the learning environment.

Keywords: Voice recognition, effective learning environment, virtual medium

INTRODUCTION

Individuals and software icons are involved in the development of digital resources in education. Voice Recognition Programs, Voice Recognition Software and Dragon Voice Recognition Apps are available to enhance the quality in education. Few of them are utilised as an interface in the field of special children. There are already specific in assisting physically challenged learners and the same is utilised in the environment that have learning difficulties in the class room.

Mr.C.A. James Asst. Professor of Biological Science, St. Thomas College of Education, Thoothukudi.

Dr. R. Vijaya, Asst. Professor, UGC - Human Resource Development Centre, Madurai Kamaraj University, Madurai – 625 021.

DR. M. Rajeshkumar, Asst. Professor, Centre for Educational Research, Madurai Kamaraj University, Madurai -625 021.

Voice recognition technology assists the students who lack attention and the students of other disabilities. This interactive technology is a tool for the enhancement of attention to focus on the content. Interactive visual display binds the mind of the students with the concepts and difficult terms in biology. Voice recognition technology (VRT) establishes effective interaction in the classroom and enhances the quality of educational outcomes.

RECENT DEVELOPMENTS OF VOICE RECOGNITION TECHNOLOGY IN EDUCATION

Using power point designs to present stories is not new. Voice Thread system has also been used in learning at all levels and in different subjects, Studies have been done to examine the application of these technologies for teaching English language Studies have investigated, using technology helps children comprehend the stories better. It also improves their learning motivation, and enhances their English learning in the regular English class. (Sy-ying Lee,2012). Voice recognition Technology has a number of applications for users with and without disabilities as follows:

- Voice recognition technology has been used to help writers finding it difficult.
- It is used an alternate access to a software program.
- It supports for foreign language learners.
- Voice activated products help the blinds.
- Many familiar mainstreams like call centres, games, robotics etc.

Voice commands are used in smart phones for easy access and retrieve the necessary applications. Doctors and Lawyers apply this innovative technology in dictation and transcription of their documents. It is also used in military applications, navigation systems, and 'smart' home applications. Voice recognition technology was adopted in the learning environment as screen reading software for individuals with sensory and physical limitations. (Christopher Michael Lee, 2005).

One secondary school history teacher used voice recognition software to find out the amount of time a learner took to grade papers by 40% over the traditional method (Nuance Communications, 2009).One to one voice recognition technology changed students' learning experiences through the change of instructional pedagogy (Mark G. Storz Amy, R. Hoffman, 2013)

VOICE RECOGNITION TECHNOLOGY (VRT) IN QUALITY LEARNING

Voice recognition technology assists the learners with disabilities. It prevents Repetitive strain injuries. It helps the learners with poor motor skills and vision impairments. VRT is a tool for the limited English language people. This removes the physical barriers and increases the learner's access to technology and classroom activities. Students have shown that input via VRT produce texts that are huge and better quality. VRT and word processors can allow the learner to get their thoughts in the form of text with correct spelling, right sentence structure and writing technique. This focuses more on thoughts than writing.

MORE INDEPENDENT AND STRESS FREE LEARNING

Voice recognition technology makes the learners to be more independent in their writing. Hearing the text aloud many times and correct their errors more independently. It helps them to avoid anxieties associated with editing. These second language students are assisted to practice pronunciation in a safe, low-stress environment.

Education technology educators, such as Kenneth Eastwood, have already started imagining a classroom 5 to 10 years from now, where students would wear individual headsets or microphones when verbal responses need to be recorded and evaluated during test-taking or for general classroom participation. (Alexa, 2018)

EFFECTIVE TOOL IN LEARNING DIFFICULT TERMS AND CONCEPTS

Researchers are on the way that speech recognition tools can also serve a remedial function for the biology students in the areas of reading and writing difficult biological terms and concepts. In allowing students to see the biological words on screen as they dictate, students can gain insight into important elements of phonemic awareness, such as sound-symbol correspondence. As students speak and see their words appear on the screen, the speech-to-text tool directly demonstrates the relationship between how a biological word looks and sounds. This bimodal presentation of text can be helpful for students learning biological terms and voice recognition technology has been found effective in learning difficult terms and concepts in biology.

VRT AND ATTENTION-Engaged learning engages the students to participate actively in their learning. Active participation increases their attention, focus and motivates them. Focussing promote thinking skills, and gives meaningful learning experiences. Voice is the input to select a topic followed by concepts. Selected concepts will be displayed virtually. Relevant display of the questions (stimulation) may also be seen by the learner. If the learner answers correctly he will be given reinforcement in the form of text and voice. Next concept

will be displayed virtually using learner's voice as input and the learner follows the same as above until the learner becomes mastery over the concept. If the learner answers incorrectly remedial virtual display will guide the learner one after the other till the learner attains mastery over the concept. The software is designed in such a way that the learner will be able to move to the next concept only after he becomes mastery over the previous concept. Each learner learns all the concepts from a topic. Selected Biological terms will be displayed in a virtual form and followed by a question both voice and the text form. If the learner speaks the correct answer, SRT will interact with learner to spell out the biological term. When he spells each alphabet of the biological term, every letter of the term will be displayed in a text form. If the learner spells correctly, system gives an appreciation as reinforcement and leads to the next biological term. All the biological terms which are difficult to pronounce and write are drilled until they are mastery over the biological terms. It gives the means for identifying the target learners' needs. The use of Speech Recognition Technology in Biology terminology and concept learning assists the learner. Voice Recognition Technology serves the learners to understand the concepts and to learn biology terms with hands free operation and reduce the difficulty of keying. Virtual medium keeps the learners motivated. VRT enhances interaction and reinforcements. It assists the learners to establish communication between technology and learners and engage them progressively.

VRT IN COGNITIVE SKILL-When learners are not involved, teachers initiate to remember previous knowledge and keep them involved. Voice recognition technology introduces virtual medium of instruction for which the learners have to be engaged through their voice commands. This interaction assists the learning environment active and sustains interest for learning. Integration of modern technology fosters engagement in the class room and lead them to a better learning environment.

CHALLENGES-Despite advances over the past 20 years, speech recognition technology as it is today still presents challenges for students with disabilities. It becomes comfortable for other students using speech-to-text, including training it to recognize their voices, gaining experience with a new way of interface and new learning environment. Challenge in implementation is that the software requires large memory and must be saved on a single server folder. These voice files improve in accuracy with use, so it is important that students work in their own saved file. This means that this assistive technology is not always portable. Schools have to overcome this challenge by assigning students laptops with the

software installed or storing files on a networked server that can be accessed from anywhere on campus.

TO MAKE VRT SUCCESSFUL-Prescribed microphone, sound card and memory capacity and processing speed must be provided. Explicit instruction in reading, phonological awareness and organizational strategies may be helpful. Read back feature can assist the learner to correct errors. Many newer versions of speech recognition software are included for the students that they may become more comfortable and accurate in learning biological terms and concepts.

CONCLUSION

The implication of this study is that the teacher could enhance the learning environment using Voice Recognition Technology to actively engage students who are less attentive to the class. The children are expected to sit and pay attention for hours every day. This investigation could provide possible rectifications for the present situation of attention in the classroom. VRT establishes good interaction between the learner and technology and assists them to master even the concepts. The learners retain them with broad and deep understanding.

REFERENCES

- Christopher Michael Lee (2005). Citation: Evolution, *Learning disability Spring journal, Volume 28, 182-184.*
- Mark G. Storz, Amy R. Hoffman (2013), Citation: Examining Response to a One-to-One Computer Initiative. *Research in Middle Level Education, journal 36(6) 2-4* ISSN 1940- 4476.
- Sy-ying Lee, (2012) *Department of Foreign Languages and Applied Linguistics National Taipei University*
- Sy-ying Lee, (2012) Citation: *TOJET: The Turkish Online Journal of Educational Technology – July 2012, volume 11 Issue 3 Page299*
- Comments from teachers - Retrieved from the website <http://voicethread.com/about/library/> on 10.10.2019.
- Voice activation - Retrieved from the website <https://www.educationnext.org/hey-alexa-could-voice-activation-help-kids-learn-technology> on 10.10.2019.
- disrupt-classroom/Assistive Technology - Retrieved from the website https://en.wikibooks.org/wiki/Assistive_Technology_in_Education/Speech_Recognition_Software on 10.10.2019.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

V.Jeevitha

ABSTRACT

Sustainable development is the organizing principle for meeting human development goals while simultaneously sustaining the ability of natural systems to provide the natural resources and ecosystem services upon which the economy and society depend. The desired result is a state of society where living conditions and resources are used to continue to meet human needs without undermining the integrity and stability of the natural system.

Keywords: Environment, Environmental pollution, global warming, education for SD

INTRODUCTION

Our environment is constantly changing. All across the world, people are facing a wealth of new and challenging environmental problems every day. Our planet is poised at the brink of a severe environmental crisis. Current environmental problems make us vulnerable to disasters and tragedies, now and in the future. We are in a state of planetary emergency, with environmental problems piling up high around us. Global warming has become an undisputed fact about our current livelihoods; our planet is warming up and we are definitely part of the problem. However, this isn't the only environmental problem that we should be concerned about. All across the world, people are facing a wealth of new and challenging environmental problems every day.

ENVIRONMENT

The 'environment' refers to the totality of resources and the total planetary inheritance we have received. It includes biotic (animals, plants, birds, etc.) and abiotic (sun, land, water, mountains, etc.) components. It explains the inter-relationship that exists between the abiotic and biotic components. The environment performs four crucial functions:

V.Jeevitha ,B.Ed Student, Sri Ram Nallamani Yadava College of Education, Tenkasi.

1. **Supplying Resources:** The environment contains both renewable (air, water, land) and non-renewable (fossil fuels) resources. While the former are re-usable and do not get depleted soon, non-renewable resources come with the fear of depletion.
2. **Assimilating Waste:** Economic activities generate waste which the environment absorbs through natural processes.
3. **Sustenance of Life:** The environment comprises abiotic components that aid the living of biotic components. In the absence of elements such as air, water, land, etc. there would be no life on the planet.
4. **Aesthetic Value:** The environment adds aesthetic value to life. The mountains, oceans, seas, landmasses and other scenery of the environment enhance the quality of life.

OBJECTIVES OF ENVIRONMENTAL EDUCATION

- The main motive of environmental education is to create awareness among each and every individual.
- And by that awareness we can gain knowledge and develop our skills.
- More number of volunteers is expected to participate in conserving the environment and its resources.
- The mission of giving environmental education is to make everyone understand their responsibilities.
- The ultimate aim of all these objectives is to increase the sustainability.

ENVIRONMENTAL POLLUTION

POLLUTION -Pollution of air, water and soil require millions of years to recoup. Industry and motor vehicle exhaust are the number one pollutants. Heavy metals, nitrates and plastic are toxins responsible for pollution. While water pollution is caused by oil spill, acid rain, urban runoff; air pollution is caused by various gases and toxins released by industries and factories and combustion of fossil fuels; soil pollution is majorly caused by industrial waste that deprives soil from essential nutrients.

GLOBAL WARMING -Climate changes like global warming are the result of human practices like emission of Greenhouse gases. Global warming leads to rising temperatures of the oceans and the earth's surface causing melting of polar ice caps, rise in sea levels and also unnatural patterns of precipitation such as flash floods, excessive snow or desertification.

OVERPOPULATION -The population of the planet is reaching unsustainable levels as it faces shortage of resources like water, fuel and food. Population explosion in less developed

and developing countries is straining the already scarce resources. Intensive agriculture practiced to produce food damages the environment through use of chemical fertilizer, pesticides and insecticides. Overpopulation is one of the crucial current environmental problems.

URBAN SPRAWL-Urban sprawl refers to migration of population from high density urban areas to low density rural areas which results in spreading of city over more and more rural land. Urban sprawl results in land degradation, increased traffic, environmental issues and health issues. The ever growing demand of land displaces natural environment consisting of flora and fauna instead of being replaced.

NATIONAL RESOURCE DEPLETION -Natural resource depletion is another crucial current environmental problem. Fossil fuel consumption results in emission of Greenhouse gases, which is responsible for global warming and climate change. Globally, people are taking efforts to shift to renewable sources of energy like solar, wind, biogas and geothermal energy. The cost of installing the infrastructure and maintaining these sources has plummeted in the recent years. If we deplete all the natural resources now itself, definitely our future generation will suffer tremendously therefore it creates a big impact on sustainability.

WASTE DISPOSAL-The over consumption of resources and creation of plastics are creating a global crisis of waste disposal. Developed countries are notorious for producing an excessive amount of waste or garbage and dumping their waste in the oceans and, less developed countries. Nuclear waste disposal has tremendous health hazards associated with it. Plastic, fast food, packaging and cheap electronic wastes threaten the well being of humans. Waste disposal is one of urgent current environmental problem.

OZONE LAYER DEPLETION -The ozone layer is an invisible layer of protection around the planet that protects us from the sun's harmful rays. Depletion of the crucial Ozone layer of the atmosphere is attributed to pollution caused by Chlorine and Bromide found in Chloro-fluoro carbons (CFC's). Once these toxic gases reach the upper atmosphere, they cause a hole in the ozone layer, the biggest of which is above the Antarctic. The CFC's are banned in many industries and consumer products. Ozone layer is valuable because it prevents harmful UV radiation from reaching the earth. This is one of the most important current environmental problems.

SUSTAINABLE DEVELOPMENT- Sustainable development is the practice of developing land and construction projects in a manner that reduces their impact on the environment by allowing them to create energy efficient models of self-sufficiency. This can take the form of installing solar panels or wind generators on factory sites, using geothermal heating techniques or even participating in cap and trade agreements. The biggest criticism of sustainable development is that it does not do enough to conserve the environment in the present and is based on the belief that the harm done in one area of the world can be counter balanced by creating environmental protections in the other.

Sustainable development can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is the practice of maintaining world processes of productivity indefinitely—natural or human-made—by replacing resources used with resources of equal or greater value without degrading or endangering natural biotic systems. Sustainable development ties together concern for the carrying capacity of natural systems with the social, political, and economic challenges faced by humanity. Sustainability Science is the study of the concepts of sustainable development and environmental science. There is an additional focus on the present generations' responsibility to regenerate, maintain and improve planetary resources for use by future generations. Sustainable development has 3 goals: to minimize the depletion of natural resources, to promote development without causing harm to the environment and to make use of environmentally friendly practices.

ENVIRONMENTAL SUSTAINABILITY-The goal of environmental sustainability is to conserve natural resources and to develop alternate sources of power while reducing pollution and harm to the environment. For environmental sustainability, the state of the future – as measured in 50, 100 and 1,000 years is the guiding principle. Many of the projects that are rooted in environmental sustainability will involve replanting forests, preserving wetlands and protecting natural areas from resource harvesting. The biggest criticism of environmental sustainability initiatives is that their priorities can be at odds with the needs of a growing industrialized society

EDUCATION FOR SUSTAINABLE DEVELOPMENT-Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: The concept of 'needs', in particular, the essential needs of the world's poor, to which overriding priority

should be given; and The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

—*World Commission on Environment and Development, (1987)*

It is defined as education that encourages changes in knowledge, skills, values and attitudes to enable a more sustainable and equitable society. ESD aims to empower and equip current and future generations to meet the needs using a balanced and integrated approach to the economic, social and environmental dimensions of sustainable development.

The concept of ESD was born from the need for education to address the growing and changing environmental challenges facing the planet. In order to do this, education must change to provide the knowledge, skills, values and attitudes that empower learners to contribute to sustainable development. At the same time, education must be strengthened in all agendas, programmes, and activities that promote sustainable development. Sustainable development must be integrated into education and education must be integrated into sustainable development. ESD promotes the integration of these critical sustainability issues in local and global contexts into the curriculum to prepare learners to understand and respond to the changing world.

ESD aims to produce learning outcomes that include core competencies such as critical and systematic thinking, collaborative decision-making, and taking responsibility for the present and future generations. Since traditional single-directional delivery of knowledge is not sufficient to inspire learners to take action as responsible citizens, ESD entails rethinking the learning environment, physical and virtual. The learning environment itself must adapt and apply a whole-institution approach to embed the philosophy of sustainable development. Building the capacity of educators and policy support at international, regional, national and local levels helps drive changes in learning institutions.

CONCLUSION

Education must be revisited in light of a renewed vision of sustainable human and social development that is both equitable and viable. This vision of sustainability must take into consideration the social, environmental and economic dimensions of human development and the various ways in which these relate to education: 'An empowering education is one that builds the human resources we need to be productive, to continue to learn, to solve problems, to be creative, and to live together and with nature in peace and

harmony. When nations ensure that such an education is accessible to all throughout their lives, a quiet revolution is set in motion: education becomes the engine of sustainable development and the key to a better world.

REFERENCES

- https://en.wikipedia.org/wiki/Sustainable_development
- <https://www.conserve-energy-future.com/15-current-environmental-problems.php>
- <https://www.researchgate./publications/>
- <https://www.ukessays.com>
- <https://www.yourarticlelibrary.com>

ABSTRACT

A dynamic and progressive society has to find ways and means to resolve the issues and solve the problems, which it faces in any sphere of life. Educational development has always been a forerunner of social change and development. Therefore, we have been striving hard to find appropriate responses to the challenges in the field of education so as to make it a powerful vehicle of social change. In higher education there are so many issues raised towards aim of education, teacher preparation, teaching methodology, curriculum, guidance and counseling, quality of educational system, examination system, research etc. This article deals with the issues in higher education and their remedies.

Key words: Issues, Remedies, Reasons, Social change, Higher education

INTRODUCTION

A dynamic and progressive society has to find ways and means to resolve the issues and solve the problems, which it faces in any sphere of life. Educational development has always been a forerunner of social change and development. Therefore, we have been striving hard to find appropriate responses to the challenges in the field of education so as to make it a powerful vehicle of social change. In higher education there are so many issues raised towards aim of education, teacher preparation, teaching methodology, curriculum, guidance and counseling, quality of educational system, examination system, research etc. This article deals with the issues in higher education and their remedies.

IMPRACTICAL AIMS

The aim of university education in India is praiseworthy but most of them are based on idealism. These aims have neither been achieved to this date nor are they expected to be ever achieved. The aims determined by the University Education Commission are very good but it is not easy to provide facilities to achieve them.

Dr.J.MariaPrema, Assistant Professor of Education, St. Ignatius College of Education, Palayamkottai - 627 002

Remedy: The Indian educational system can follow pragmatist philosophy (utility) in curriculum transaction. There must be more opportunities for activity based learning.

WASTAGE-This is clear from the results of various institutions of higher education.

Remedy:Teacher should follow various teaching methodology according to the need and interest of the learner. There must be freedom in learning atmosphere that is freedom of thoughts.

FAULTY CURRICULUM-The curricula of higher education are full of defects. The subjects of study are old and out of date. The curricula fail to fulfil the interests of different types of students.

Remedy: There should be diversification of courses in curriculum of the universities as determined by the Mudaliar Commission for the curriculum of the secondary schools. The curriculum of the universities should be flexible so that it may adapt with the changing conditions and needs of the society. The University Education Commission has rightly remarked, "Educational systems are built for the time and not for all time. There are no changeless ways of educating human nature. A curriculum which was prevalent in the Vedic period of the renaissance cannot continue unaltered in the twentieth century."

EMPHASIS OF SPECIALIZATION-In university and higher education in India emphasis is given on the specialization in different subjects. When the students complete the university education they acquire special knowledge and skill in some particular subjects but their viewpoint remains unbalanced and narrow.

Remedy: Different branches of knowledge should be interlined and harmonious relations established among them. Along with the education of art and science, provision should also be made for imparting general education so that the students may acquire the knowledge of other subjects. This will also help the development of personality of the students. The subjects and curriculum of the general education should be selected in accordance with students of particular fields.

LACK OF GUIDANCE AND COUNSELLING-There is no provision for giving proper guidance and counseling to the students. Hence, the students select their courses wither according to their own choice or with the advice of some inexperienced persons. Many

students select subjects which are either against their interests and tendencies or which they are not capable of studying.

Remedy: There should be a provision of experienced and trained persons to provide guidance and counseling to the students from beginning to the end. The suggestions given by Mudaliar Commission and Kothari Commission hold good for the higher education also.

LOW STANDARD OF TEACHING-In his book *A New Deal for Our Universities*, K.R.S.Iyenger has remarked, "Our standards whether in scholarship or teaching, never very high or exacting, are now fast racing to the bottom,"

Remedy: Suggestions for raising the standard of teaching include increase in the salaries of teachers; more than 18 hours of teaching work in a week; improvement in the condition of their service; provision of tutorial classes; well-organized libraries and laboratories and encouragement to debates and discussions. The Kothari Commission has recommended professional training to junior lecturer's organizations or Re-orientation Courses for new lecturers, etc.

ENGLISH AS MEDIUM OF INSTRUCTION-India's subservience to the British for a long time has created so much reverence and love for English that even now English has not been replaced as the medium of instructions with some other Indian language or national language.

Remedy:The University Education Commission has suggested the use of regional language as medium of instruction. Some of the universities of the country have been endeavoring to give practical shape to the suggestion of making regional language the medium of instructions. It would be convenient to conduct the examination of All India Services in the federal language.

DEFECTIVE SYSTEM OF EDUCATION-The Indian University Commission in 1902 pointed out "The greater evil from which university education in India suffers is that teaching is subordinate to examination, and not examination to teaching. "The University Education Commission of 1949 also pointed out, "If we are to suggest one single reform in university education, it should be that of examinations."

Remedy:Examination system can be reformed b including scientific methods in the examination of students by progressive test, preparation of objective progressive test and

determination of 70, 55 and 40 per cent marks for awarding first, second and third division to the students. Abolition of internal examination, starting internal assessment or evaluation system and training of teachers in new system of assessment may remove many of the defects of the present examination system.

INDISCIPLINE-Prof.N.K. Siddhant, former Vice-Chancellor of Calcutta University, has mentioned the following types of activities coming within the indiscipline;

- ❖ Financial irregularity
- ❖ Minor misconduct
- ❖ Disorderly misconduct
- ❖ Theft and burglary
- ❖ Sex misconduct
- ❖ Misuse of privilege
- ❖ Cheating in examination

In his book Indian University Administration Prof. N.K. Siddhant said, "The problem of maintaining discipline in the seats of higher education is assuming greater importance every day."

Remedy:According to Prof.Siddhant the best way of solving the problem of indiscipline is to divert the activities of the young students into healthy channels including sports, games, co-operative living in hostels, self-management of messes, debates and symposia. He has also made the following suggestions for solving the problem of indiscipline among the students;

- In each centre of higher education the statistics of different types of indiscipline should be maintained.
- The family and social life of the students and records where the student has studied earlier should be studied.
- The cause of each crime committed by the students should be discovered.

STUDENT UNIONS-The student unions in educational institutions of higher education pose serious problems before us. The harms which these student unions cause to the students are well-known. The leaders of these unions interfere in each and every work of the college. The leaders of these unions interfere in each and every work of the college. If the teacher, principal or manager of the college does any work which is against their wish they strongly

oppose such works. They want that the appointment of the teachers, their teaching work and all the policies connected with the college should be done with their advice.

Remedy: Legislation be introduced for the registration of university or college societies to insure that they observe certain rules in elections, method of keeping accounts and similar and other things.

REASONS OF FALLING STANDARDS

Rapid Growth in the Number of Students-The number of students receiving higher education in India is constantly increasing and it is likely to increase more in the near future. Hence it is not possible to provide them with necessary facilities. The number of able teachers is not increasing with the same proportion.

Lack of Necessary Facilities-In Indian universities the students do not have the same facilities which are provided in other countries of the world. They have to face the shortage of books. The libraries are not properly equipped. The environment is likely to lower the standard of education. There are not even proper seating arrangements for the students. Many degree colleges do not possess even playgrounds.

Poor Condition of the Teachers-The teachers of Indian degree colleges and universities get so meager salaries that they adopt other means in order to meet their expenses. Hence, they are not able to devote themselves heart and soul into the teaching work.

Working Conditions of the Teachers-The teachers have been burdened with too much work. Their working conditions are such that they are not able to perform their teaching work properly.

Wide Gulf between the Teachers and Students-There is a wide gulf between the students and the teachers. The number of students in each class is so much that the teacher is not able to recognize each student. There exists a wide gulf between the teachers and the students.

Defective Examination System-As too much importance is given to the essay type of examinations, the students think that they will achieve success by studying some selective questions and hence to not devote themselves heart and soul into the studies throughout the years.

Party-Politics-The prevalence of party-politics is responsible for the decline in the standard of education in Indian universities. Different political parties and persons are ever eager to establish their control over universities. The groupism of the teachers also lowers the standard of teaching as they remain busy in group party-politics and do not get sufficient time for teaching work.

Indiscipline-Grouping indiscipline among the students is one of the chief causes responsible for the decline in standards of higher education. The prominent among its causes are;

- Social and difficulties
- Economic difficulties
- Growing unemployment
- Non-availability of educational facilities
- Group party-politics
- Lack of interest in the curriculum

CONCLUSION

Higher education, too, has been facing numerous problems in our country. It has failed to help students to earn their livelihood, and it has continued to expand despite the absence of employment. Its failure in this regard is the result of many factors. University education is lacking in direction because of political pressures, the sovereignty of universities themselves, and the quality of student life, lack of finance and absence of clearly defined objectives. The country lacks any concrete plan for taking advantage of higher education. Since most institutions of higher education are located in cities, its benefit goes mainly to students living in urban areas. In addition, there is need for intellectual development, new curricula for the universities, etc. So this paper will give a clear cut idea of issues and remedies in higher education and the reasons for the issues are also discussed here.

REFERENCES

- Yogendra K. Sharma, History and Problems of Education (2001) Vol-1, Kanishka Publishers, New Delhi.
- Pandey,M. Teacher Education Challenges and Expectation (2013) Omega Publications, New Delhi.
- Yogesh Kumar Singh, Teacher Education (2005) A.P.H.Publishing Corporation, New Delhi.
- Suresh Bhatnagar, Development of Educational System in India (2008) Vinay Rakheja, Meerut.

COMPUTER ADAPTIVE TESTING : A NEW HORIZON IN QUALITY TESTING

G. Usha
R. Vijaya
M.Rajeshkumar

ABSTRACT

It is rightly remarked "Education can, and must, contribute to a new vision of sustainable global development." (UNESCO, 2015). The greatest challenge in education is that a teacher should possess the necessary skills and knowledge to make use of technology as a tool of instruction and evaluation. The oft-times used tools in education is testing. To evaluate students' knowledge and skills in concepts or subjects is the focus of testing. The advancements in computer technology and psychometric theories have brought about stimulating changes in the test format from conventional paper-and-pencil tests to computerized adaptive testing (CAT). A CAT is a method for organising tests that tailors to the ability level of the test-taker. It creates creative item formats and more interesting and realistic environments. Also test management flexibility, immediate scoring, increased security of test, increased motivation, etc. are some of the advantages. The highlight of CAT is the optimal balance of accuracy and efficiency. Computer adaptive testing an innovative test model is gathering notice as a means to assess students' performance and progress.

Keywords:Computer Adaptive Testing, Global Development, Innovative Test Model, Psychometric Theories

INTRODUCTION

Global challenges that influence all areas of human life in the world are conditions that are naturally going on as the consequence of the rapid development of science and technology. It is impossible to avoid but have to be faced by using resources with high quality especially human resources. Teacher's quality is the key to unlock the challenges in education and

G. USHA (Ph.D. Scholar), Asst. Professor of Mathematics, St. Thomas College of Education, Thoothukudi.

R. VIJAYA (Guide), Asst. Professor UGC - Human Resource Development Centre Madurai Kamaraj University, Madurai

M. RAJESHKUMAR (Co-guide), Asst. Professor Centre for Educational Research Madurai Kamaraj University, Madurai

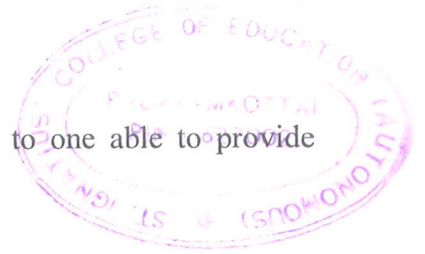
maintain peace in the globe. The greatest challenge in education is that a teacher should possess the necessary skills and knowledge to make use of technology as a tool of instruction and evaluation. The students have to demonstrate their abilities to use what have been learnt because the affection grows in performance-based testing. For this, new ways of performance assessment are to be developed. The computer-based technology smoothens the path of test administration, scoring, data analysis and reporting. Computer Adaptive Testing technology needs fewer test items to reach at a more accurate estimate of examinees unlike conventional tests. No two children learn the same. Computerized adaptive assessments are thus developed to test differently and allow teachers to see their students as they are - each with their own ground of knowledge. With flexible delivery options, these assessments can scale to fit our needs. The outcome will be fruitful for the students, teachers and administrators.

THEORETICAL BASIS OF COMPUTERIZED ADAPTIVE TESTS

Computer-based technology is renovating not only the structure and content of the curriculum of schools but also the whole teaching-learning process. In particular, they influence the creation of types of tests and their assessment in learning. "With the advances in computing technology and psychometrics, most paper and pencil (P&P) tests can be transformed into the format of computerized adaptive testing (CAT)" (Lord, 1980; Weiss, 1976; Wainer et al., 1990). It must be signified that "computer adaptive testing is unlike computerized administrated testing which usually makes a mention of a system that casually selects a test item or a subtest from a pool of items without having consideration on the ability of the students" (Beevers et al., 1995). The supremacy of CAT over conventional test is that it enables more potent and precise estimation of traits of the students.

With CAT, students take tests that best suit their ability levels. This happens just by adjusting the stimuli to the student based on his/her preceding response. The intensity of difficulty of the subsequent stimulus is selected so that it is not too easy or too difficult for the examinee. The first item is a medium-difficulty one because the abilities of the students are unknown. The second stimulus is adapted to the ability level of each examinee. The computer thus adapts to the student's ability level and evaluates his/her knowledge. Jettmar and Nass cite CATs as a distinct case of intelligent user interfaces and also added that the performance of the examinees is quietly monitored and the difficulty level of the questions are adapted accordingly. Brusilovskiy describes CATs as an element of a paradigm shift

within educational software development from “one size fits all” to one able to provide maximum levels of interaction and personalization.



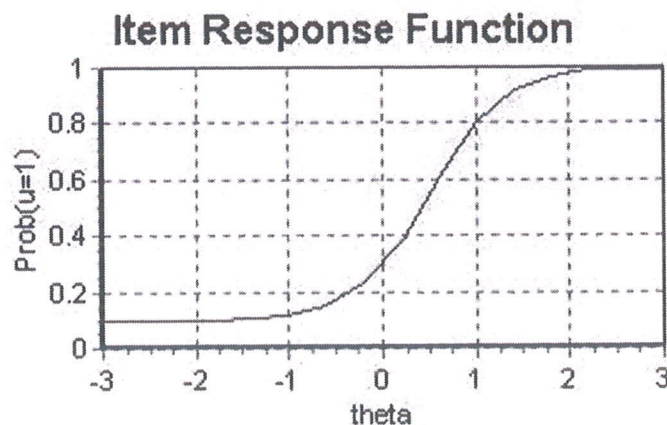
At the end of the test, no one is likely to get all answers wrong and scores zero mark; the less competent students would find some items that they could solve and hence retain their interest and motivation in the subject. Neither anyone is likely to get all answers correct and scores full mark; thus even the top students understand that there are rooms for improvement. It may happen that "two examinees get the same number of items correct, however they may have different scores that depend on the parameters like difficulty, discrimination and guessing of the items" (Lord, 1980; Hambleton & Swaminathan, 1985).

ITEM RESPONSE THEORY (IRT)

In Psychometrics, Item response theory (IRT) also called as true score theory which is an ideal for the test design, analysis, scoring and some instruments measuring abilities, attitudes, etc. It is a testing theory based on the relationship between the performance of a student on a stimulus and the levels of performance on an overall ability measurement that stimulus was designed to measure. IRT is a “family of mathematical models that describe how people interact with test items” (Cisar, Radosav, Markoski, Pinter, & Cisar, 2010).

If a student has high ability, he or she will probably get an easy item correct but if a student has low ability and the test item is difficult, he or she will probably get the item wrong. When item responses are analysed, the question being tried to answer is, “What is the probability of a student with a given ability answering correctly to a stimulus with a given difficulty?”. In the following figure, the x-axis represents the ability of the student and the y-axis represents the probability of a right answer to one stimulus. The s-shaped curve exhibits the probabilities of a right answer for students with different levels of ability

(Figure 1). Item Response Function



CHARACTERISTICS OF COMPUTER ADAPTIVE TESTING

Before implementation of CAT the following characteristics should be considered.

Students can neither pass over test items nor perform a post-test evaluation. In computer adaptive testing the students are not allowed to miss questions and come back to test items later. Unlike conventional tests, CAT requires the student to answer the test questions as they appear. Each question given to the student depends on the answer to the preceding test item and therefore the entire response pattern is taken into account while finding the student's overall performance.

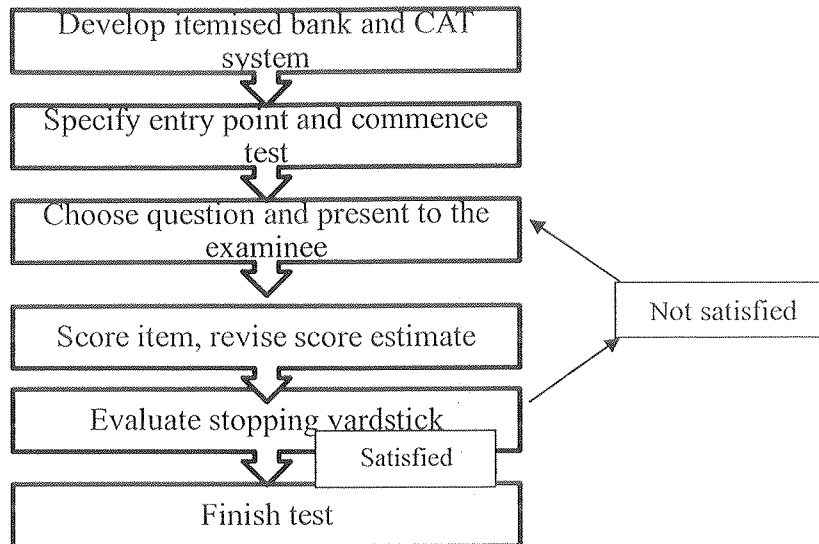
Item pool size reins the application of CAT. The number of test questions is a requisite to encompass all the skills taught in the institution over different levels of difficulty. This provides CAT a method limited to companies with essential resources. A tremendous endeavour is needed to maintain a CAT item pool and also to keep the item content brand new and secure. The development and maintenance of a CAT item pool is quite deserving the effort since it gives the true score of the students and improve their measurement and satisfaction in the testing process.

COMPONENTS OF COMPUTER ADAPTIVE TESTING

From an architectural perspective, "a CAT is composed of five components." (Weiss & Kingsbury, 1984; Thompson, 2007). The components are test content and psychometric ones (Figure 2). They are

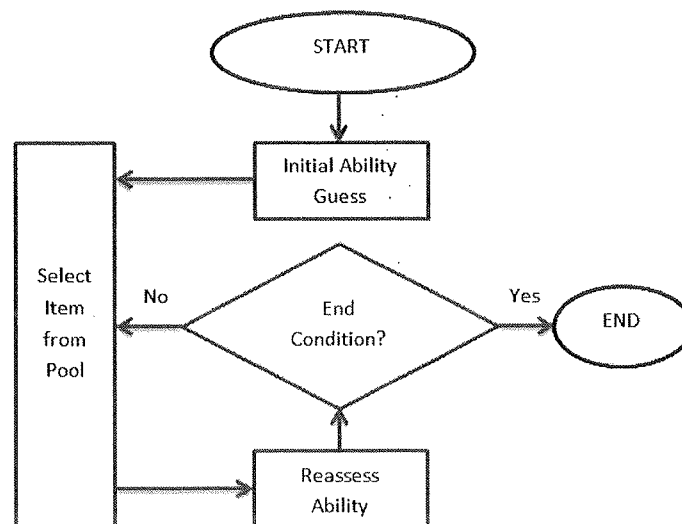
- Itemised Bank
- Entry Point
- Algorithmic Item Selection
- Scoring Scheme
- Stopping yardstick.

Figure 2-A framework of CAT components



Working of a Computer Adaptive Testing

Figure 3 CAT Algorithm



The CAT algorithm is iterative (Figure 3) with the steps below:

- The best item is looked for the current ability estimate of the student from the item pool .
- The selected item presented to the student is either a correct response or a wrong response.
- According to the preceding responses the estimation of the student ability is updated.

All the above three steps are repeated in order till stopping rules are given.

Benefits of Computer Adaptive Testing

- Computer adaptive testing provides a lot of advantages when compared to conventional tests. Some benefits of the CAT are as follows:
- Tests are given “on demand” and scores over an ample range of abilities are available immediately.
- Neither answer sheets nor trained test administrators are needed. Test administrator differences are eliminated as a factor in measurement error.
- Tests are self-paced. The student does not have to wait for others to end the item before proceeding to the next frame. Thus these tests give extra time for the students that need it, reducing test anxiety.
- Since the test items are chosen according to the ability level of the student the item content differs from student to student thus increasing the test security.
- Computerized testing accommodates an ample range of varieties of item.
- CATs take less duration by maintaining same reliability and precision is attained with fewer items. The reduction of test length leads to reduction of fatigue.

CONCLUSION

To take up on the path of sustainable development an intense transformation of how we celebrate and perform will be required. If we want to make a sustainable world we should engage with issues related to sustainability and become sustainability change-makers. Education is a way to unlock the challenges and maintain peace in the globe. The government is in process of supplying computers to school thus developing and administering the CAT system will be easy. As per the need of the schools, the item banks can be downloaded and their own CAT systems could be established. The teachers and students should empower them with innovative strategies for sustainable development. They have to take steps early and wisely ensure that the assessment procedures are well integrated with the computer based learning process to ensure its maximum effectiveness. CAT is a new horizon within educational software development from “one size fits all” to one able to provide maximum level of interaction and personalization.

REFERENCES

- Beevers, C.E., McGuire, G.R., Stirling, G. & wild, D.G. (1995). Mathematical Ability Assessed by Computer. *Computers & Education*, 25(3), 123-132.
- Cisar, S. M., Radosav, D., Markoski, B., Pinter, R., & Cisar, P. (2010). Computer Adaptive Testing for Student's Knowledge in C ++ Exam. *Presented at the 11th IEEE International Symposium on Computational Intelligence and Informatics*, Budapest, Hungary.
- Czhangbb (2015, March23). How does CAT work [Flowchart]. Retrieved 18.10.2019 from <http://discuss.cle.ust.hk/mediawiki/index.php?title=File:2012-11-23-Cat.png>
- Hambleton, R.& Swaminathan, H. (1985). Item Response Theory: Principles and Applications. Boston, MA: Kluwer Nijhoff. Lawrence M. Rudner (2001, December). Item Response Function[Curve]. Retrieved 18.10.2019 from <http://echo.edres.org:8080/irt/>
- Lord, M.F. (1980). *Applications of item response theory to practical testing problems*.
- Hillsdale NJ: Erlbaum. Scantron Corporation. (2019). *What's a CAT ? A primer on Computer-Adaptive Testing*. Retrieved from <https://www.scantron.com/resources/ps-cat/>
- Thompson, N. A. (2007). A practitioner's guide for variable-length computerized classification testing. *Practical Assessment Research & Evaluation*, 12(1). Retrieved from online: <http://pareonline.net/getvn.asp?v=12&n=1>
- UNESCO Education sector. (2017). *Education for Sustainable Development Goals: Learning Objectives*. Retrieved from <https://sustainabledevelopment.un.org/content/documents/926unesco9.pdf>
- Wainer, H. et al. (Ed., 1990), *Computerized Adaptive Testing: A Primer*. Hillsdale, New Jersey: Lawrence Erlabum Associates, Publishers.
- Weiss, D.J. (1976). Adaptive testing research in Minnesota: Overview, recent results, and future directions. In C.L. Clark (Ed.), *Proceedings of the first conference on computerized adaptive testing*, 24-35. Washington, DC: United States Civil Service Commission.
- Weiss, D.J., Kingsbury, G.G. (1984). Application of Computerized Adaptive Testing to Educational Problems. *Journal of Educational Measurement*, 21 (4), pp.361-375.

- UNESCO Education sector. (2017). Education for Sustainable Development Goals: Learning Objectives. Retrieved from <https://sustainabledevelopment.un.org/content/documents/926unesco9.pdf>
- Wainer, H.et al.(Ed., 1990), Computerized Adaptive Testing: A Primer. Hillsdale, New Jersey: Lawrence Erlabum Associtates, Publishers.
- Weiss, D.J.(1976). Adaptive testing research in Minnesota: Overview, recent results, and future directions. In C.L. Clark (Ed.), Proceedings of the first conferene on computerized adaptive testing, 24-35. Washington, DC: United States Civil Service Commission.
- Weiss, D.J., Kingsbury, G.G.(1984). Application of Computerized Adaptive Testing to Educational Problems, Journal of Educational Measurement, 21(4), pp.361-375.

PRIORITIZING RURAL GIRLS' EDUCATION FOR LIFELINE DEVELOPMENT

R.Balasubramanian

Dr. V.Lavanya

ABSTRACT

Throughout the developing world, girls face significant barriers to getting a quality education. Often, families living in poverty cannot afford to send all of their children to school and, when forced to choose, send their sons. Gender equity in education includes equal access to school and creating a school environment that has a safe, enabling environment for both girls and boys, equal opportunities in learning, and a focus on improving learning outcomes for basic literacy and numeracy as well as life skills. Educating girls and women is a powerful investment that benefits both individuals and society by unlocking the potential to improve health, nutrition, social justice, democracy, human rights, social cohesion, and economic prosperity for current and future generations. The Education 2030 agenda recognizes that gender equality requires an approach that ensures that girls and boys, women and men not only gain access to and complete education cycles, but are empowered equally in and through education. Poverty, geographical isolation, minority status, disability, early marriage and pregnancy, gender-based violence, and traditional attitudes about the status and role of women, are among the many obstacles that stand in the way of women and girls fully exercising their right to participate in, complete and benefit from education. This article highlights the problems in educating and how to overcome for lifelong development.

Key words: Rural Girls, Quality Education, Gender Equity, Equal Opportunities

INTRODUCTION

Educating a girl child in India is very necessary to remove various social issues against girls in the Indian society. Girls are treated as load and taker of money by the parents especially in the rural areas. Often, girls are marginalised and are out of school simply because they are girls and it is not the cultural norm in some society.

R.Balasubramanian, Research Scholar. TNOU, Chennai

Dr. V.Lavanya, Assistant Professor in Education. PSN College of Education, Tirunelveli

Their chances of getting a quality education are even smaller if they come from a poor family, live in a rural area or have a disability. The education of the girl child has the ability of bringing socio-economic changes. However, as we live in the 21st century and know well the value of both, boys and girls; both are equally responsible for the development and bright future of the country. So, it is an urgent need to save and educate a girl child in India if we really want to be the citizen of a developed country. Democratic countries including India have a constitution that guarantees equal rights to both women and men. Primary education is a key right. When a girl is protected through her rights, the society is assured of its sustainability. Realizing how important education is, both government and non-government have taken various projects to strengthen girl's child education.

LEARNING TO LEAD

Girls' education and women's empowerment have an obvious connection. Girls who are able to attend school, and thus to develop important skills such as literacy and numeracy and greater analytical skills, are better able to navigate the world around them. And from that comes a sense of control and an ability to exercise their voice. Women with higher levels of education are less likely to accept domestic violence, have greater control over household resource decisions, and have greater freedom of movement. World Bank researcher Jeni Klugman, who ultimately concludes that "education is particularly powerful in helping women overcome unequal and oppressive social limits and expectations so they can make choices about their lives."

The female education in India is highly necessary for the future of the country as women are the first teachers of their children means future of the nation. If education of the women is getting ignored, it would be the ignorant of bright future of the nation. Uneducated women cannot actively participate in handling the family, proper care of the children and thus weak future generation. We cannot count all the advantages of the women education. An educated women may easily handle her family, make each family member responsible, infuse good qualities in children, participate in the social works and all would lead her towards the socially and economically healthy nation. By educating a man, only a man can be educated however educating a woman, whole country can be educated. Lack of women education weakens the powerful part of the society. So, women should have full rights for the education and should not be treated as inferior to men.

BARRIERS TO GIRLS EDUCATION

Many of the barriers to girls' education are within the school system itself.

- Indifference in attitudes and practices against girl child including their health and wellbeing.
- Illiterate parents and guardians have little awareness of the importance of education, particularly for girl children.
- Financial constraints for various types interfere in the education.
- Various domestic responsibilities along with the necessary to earn money from 13-14 years of age.
- Crisis at home snubs needs to study. i.e., no parental support, densely populated houses with bad lighting.
- Peer pressure from non -school going friends who discourage the pursuit of education.
- Lack of aspiration as the only professional options is the traditional ones which don't require education.
- Discrimination or the perception of discrimination, by higher caste peers and teachers at school.
- The government does not adequately invest in schools. Secondary schools are in shorter supply than primary schools, and colleges are even more scarce, especially for girls.
- In government schools, parents and students complained of teachers not showing up, overcrowding, and poor facilities.
- Girls disproportionately share the burden and care of ill family members and relatives.
- Inadequate water, sanitation and hygiene facilities, poor girls spend six hours each day collecting water, leaving little time for school.
- Girls living in conflict-affected areas more likely to be out of secondary school than those living in peaceful areas. Schools can be destroyed in conflict situations, while targeted attacks on girls' schools can make parents afraid to send their daughters to school.

- In emergencies, including natural disasters, increased poverty for families and lack of employment opportunities means girls are at higher risk of early marriage or ending up in prostitution.
- Child marriage interrupts and ends girls' education also means girls have early and frequent pregnancies, which contributes to higher rates of girls dropping out of school.
- Girls with disabilities face discrimination both because of their gender and their disability, making them among the most marginalised groups of children.
- Despite India's promise to ensure certain rights for all children, huge challenges remain before the promises are realized. Sustainable development can only succeed when all children are assured of their survival, protection, and full participation in the development process. It is to move towards a world where children enjoy the full range of their rights and opportunities. The tremendous benefits to educating girls include:

- (1) increased economic productivity and reduced poverty;
- (2) lowered maternal and infant mortality rates;
- (3) delayed sexual activity and improved reproductive health;
- (4) increased gender equity
- (5) strengthened democracy;
- (6) enhanced social status; and
- (7) improved management of water and other environmental resources.

MISSION TO BRING CHANGE

Aside from the barriers to education within the school system, girls also face barriers in their homes and in the community. These include poverty, child labor, gender discrimination and harmful social norms, and insecurity and dangers on the way to school. To overcome these barriers, the following measures to be implemented.

- Providing conditional cash transfers, stipends or scholarships.
- Reducing distance to school.
- Targeting boys and men to be a part of discussions about cultural and societal practices.
- Ensuring gender-sensitive curricula and pedagogies.
- Hiring and training qualified female teachers.

- Building safe and inclusive learning environments for girls and young women.
- Ending child/early marriage.
- Addressing violence against girls and women.

CONCLUSION

Equal rights to quality education of everyone and committed to achieving gender equality in all fields, including education, through their acceptance of human rights. This means that states have legal obligations to remove all discriminatory barriers, whether they exist in law or in everyday life, and to undertake positive measures to bring about equality, including in access of, within, and through education. "Every girl, no matter where she lives, no matter what her circumstance, has a right to learn. Every leader, no matter who he or she is or the resources available to him or her, has a duty to fulfil and protect this right."

-Malala Yousafzai, Student, Nobel Peace Prize Laureate, and Co-Founder of the Malala Fund, in the foreword to the research report 'What Works in Girls' Education

REFERENCES

- Agrawal S.P.; J. C. Aggarwal (1992). *Women's Education in India: 1986-1987*. Concept Publishing Company. p. 31. ISBN 9788170223184.
- Jacobs, J. A. (1996). "Gender Inequality and Higher Education". *Annual Review of Sociology*. 22: 153–85. doi:10.1146/annurev.soc.22.1.153
- Klugman, Jeni, (2014). *Voice and Agency: Empowering Women and Girls for Shared Prosperity*. Washington: World Bank.
- *"The Bond that is Educating Girls Across India"*. *www.ipsnews.net*. 2018. Retrieved 17 April 2019.
- *Educating India's Girls: It Takes a Community*". *World Bank Group*. June 1, 2015. Retrieved 10 April 2019.
- <https://dehatindia.org/what-we-do/>

RECENT STRATEGIES IN TEACHER EDUCATION

A. Rajeswari
S.Anitha

ABSTRACT

Technology plays a vital role to promoting teacher education. In general sense the implication of technology in gathering the information and to make communication more effective. It may defined be defined as all digital devices, tools and resources, which assist in conveying the information for making communication better and helps in achieving the goals pertaining to teaching – learning and management of the educational system. In this paper, the scholar has tried to highlight the recent advanced technologies in the field of higher education.

Keywords: ICT, Higher Education, Online Learning, Educational System

INTRODUCTION

Information and Communication Technologies (ICTs) are referred to as the varied collection of technological device and resources which are made use of to communicate. They are also made use of to generate, distribute, collect and administer information. ICT is a force that has changed many aspects of the way we live. The advancement of science & technology is facing a rapid change and the generation of today's world seen to know more than those by- gone years. Technological development always warrants transition to newer technologies by exposing the cost effectiveness of any mode of education programme. A lot of advancement in science and technology due to the industrial revolution, it develops all sphere of human kind and education is not an exception of that. Education is highly affected by those development and innovations, new issues and trends emerged education like mass media approach, use of ICT, individualized learning, group dynamics and e- learning have changed nature and dimensions of the education.

MEANING

Information and Communication Technologies consist of the hardware, software, networks, and media for collection, storage, processing, transmission and presentation of information (voice, data, text, images), as well as related services.

A. Rajeswari , B.Ed., Student, Sriram Nallamani Yadava College of Education, Tenkasi – 627 804.

S.Anitha, B.Ed., Student, Sriram Nallamani Yadava College of Education, Tenkasi – 627 804

ICTs can be divided into two components, Information and Communication Infrastructure (ICI) which refers to physical Telecommunications systems and networks (cellular, broadcast, cable, satellite, postal) and the services that utilize those (Internet, voice, mail, radio, and television), and Information Technology (IT) that refers to the hardware and software of information collection, storage, processing, and presentation. The main use of ICT in education are E-learning, M-learning, blended learning, telelearning and ubiquitous learning.

E- learning: “E-Learning as the use of any of the new technologies or applications in the services of learning or learner support.” – *Laurillare (2006)*.

M-learning: M-learning means acquisition of any knowledge and skill through using mobile technology anytime, anywhere that results in alteration of behaviour.- *Gedden S.J.*

Blended learning: This refers to learning models that combine traditional classroom practice with e-learning solutions.

Telelearning: It is a form of education where the student and teacher is not situated in the same geographical location and communicates through digital forms such as email, telecommunications, audio and video streaming.

HIGHER EDUCATION

Education in whole is a wide area which can be bifurcated majorly in levels like primary, secondary, higher secondary and higher education. Here by higher education we mean the entire education and learning in the life of a person after 10 + 2 i.e. the schooling level. Thus higher education not only means the formal higher education rewarded by the certified degrees but also the perpetual learning and ever-developing knowledge. Here it is necessary that education, learning and knowledge are read and understood with their soul. Education is generally seen as a formal process of instruction, based on a theory of teaching, where learning can occur with or without formal institution; at any age, time, or manner. While knowledge accumulation takes place more or less outside the formal institution and environment keeping pace with the developing world.

Higher education plays a pivotal role in the development of a country, as it is viewed as a powerful means to build knowledge based society. In India, higher education imparted by universities is facing challenges in terms of *Access, Equity and Quality*. The Government of India has taken several initiatives during the Eleventh Five Year Plan period to increase *access* to higher education by adopting state specific strategies, enhancing the relevance of higher education through Curriculum reforms, Vocational programs, Networking,

Information Technology adoption and Distance Education along with reforms in governance. However in terms of Gross Enrolment Ratio (GER), India still lags behind the worldwide average and emerging countries like Brazil and China.

The Indian Higher Education System has established itself as the largest system in the world in terms of number of institutions and third largest in terms of student enrolment. While several new institutions have emerged due to significant increase in private sector participation over the last few years, concerns remain regarding the quality of education being imparted to students.

Indian higher education is decentralized with separate councils responsible for the regulation of different institutions. The diagram below depicts the different councils of Higher Education functioning under Ministry of HRD, GOI.

SOME FACTS ABOUT INDIAN HIGHER EDUCATION

- ❖ There are 14.6 million students undergoing higher education in India as of 2011
- ❖ There has been a significant rise in enrolment from rural population in higher education. The GERs in rural areas have been rising steadily and expected to reach 12.84% by 2020.
- ❖ A growing number of women are expected to enrol in higher education institutes. Currently over 6.1 million women are enrolled in higher education and is expected to grow to 12.15 million by 2020.
- ❖ There is a high demand from working professionals for executive education programs.
- ❖ Three Indian universities were listed in the times higher education list of the world's top 200 universities namely Indian Institutes of Technology (IIT), Indian Institutes of Management (IIM) and Jawaharlal Nehru University in 2005 and 2006. (Source: UGC Higher Education in India 2008 - 11th five year plan vol.II)

ICT AND HIGHER EDUCATION

The major teaching and learning challenges facing higher education revolve around student diversity, which includes, amongst others, diversity in students' academic preparedness, language and schooling background. Education is perhaps the most strategic area of intervention for the empowerment of girls and women in any society and the use of information and communication technologies (ICTs) as an educational tool in the promotion of women's advancement has immense potential. The application of ICTs as a tool for

effective enhancement of learning, teaching and education management covers the entire spectrum of education from early childhood development ,primary, secondary, tertiary, basic education and further education and training.

The Information and Communication Technology (ICT) curriculum provides a broad perspective on the nature of technology, how to use and apply a variety of technologies, and the impact of ICT on self and society. Technology is about the ways things are done; the processes, tools and techniques that alter human activity. ICT is about the new ways in which people can communicate, inquire, make decisions and solve problems. It is the processes, tools and techniques for:

1. Gathering and identifying information
2. Classifying and organizing
3. Summarizing and synthesizing
4. Analyzing and evaluating
5. Speculating and predicting

Enhancing and upgrading the quality of education and instruction is a vital concern, predominantly at the time of the spreading out and development of education. ICTs can improve the quality of education in a number of ways: By augmenting student enthusiasm and commitment, by making possible the acquirement of fundamental skills and by improving teacher training. ICTs are also tools which enable and bring about transformation which, when used properly, can encourage the shift an environment which is learner-centered.

ICT BENEFITS TO UNIVERSITIES

The innovative use of ICT is believed to be a game changer that can significantly strengthen India's higher education system and propel the country into becoming a "*Knowledge Superpower*". The innovative use of IT in Higher education addresses the three fundamental challenges of *Access*, *Equity* and *Quality*.

The adoption of IT/ICT in higher education facilitates the following:

- ❖ Improving the access to the system through online education.
- ❖ Improving the quality of teaching especially across remote locations

- ❖ Increasing transparency and strengthening systems, processes and compliance norms in Higher Education Institutes
- ❖ Measure students learning participation and effectiveness
- ❖ Analyze student behaviour to maximize students involvement, optimize retentions, and improve placements

CONCLUSION

The use of ICT in education can increase access to learning opportunities. It can help to enhance the quality of education with advanced teaching methods, improve learning outcomes and enable reform or better management of education systems. Extrapolating current activities and practices, the continued use and development of ICTs within education will have a strong impact on: What is learned, how it is learned, when and where learning takes place, & who is learning and who is teaching. ICT makes learning interesting, interactive and fun. It has the right blend of content and cutting – edge technologies that offers the best benefits for students. ICT is becoming an important part of education and improve learning opportunities for students.

REFERENCE

- Dr. Suresh Chandra Pachauri and MR. Pardeep Kumar, (2011). *E-Learning: Advanced Educational Technology* : A.P.H. Publishing Corporation, ISBN: 978-81-313-1051-9
- Clark, Ruth. C., Mayer, Richard. E. (2003). *E-Learning and the science of instruction: proven guidelines for consumers and designers of multimedia learning*. Jossey-Bass/Pfeiffer Edition. ISBN: 0-7879-6051-0
- Elias, T. (2010). Universal instructional design principles for Moodle. *International Review of Research in Open and Distance Learning*, 11(2). <Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/869>.>
- <http://mlearningtrends.blogspot.in/2010/10/mlearning-feature-sets-possibilities.html><retrived on 14.02.2012>
- <http://www.brighthub.com/education/online-learning/articles/36809.aspx>
- <http://www.mobl21.com/blog/07/benefits-of-mobile-learning/>
- <http://www.studygs.net/online/mlearning.htm>
- http://en.wikipedia.org/wiki/Higher_Education_in_India

ABSTRACT

Educational technology is the process of integrating technology into education in a positive manner that promotes a more diverse learning environment and a way for students to learn how to use technology as well as their common assignments. The next level of IT responsibility will be to address student engagement and success through technology solutions and services. It is no longer enough to put a tablet or laptop in every student's hand and expect them to instantly improve test scores and graduation rates. However, with the rise of the Internet of Things (IT) we may begin to develop new ways to increase student learning engagement and change traditional classroom pedagogies to be more effective. There are definite pros and cons to the different approaches, and what we saw in our conversations were schools using models best matched how they wanted to engage with their students, with everyone sharing the same goal of tracking and improving student outcomes. Out of that linkage we can create workflows that allow instructors to simply walk into a classroom and teach the content they have prepared for the day. In the background we can have all of the classroom elements working together to support the presenting and capturing of the classroom content, which can then be provided to students in a synchronous or asynchronous fashion.

Keywords: Educational Technology, Diverse Learning Environment ,Asynchronous Fashion,Synchronous

INTRODUCTION

The Association for Educational Communications and Technology (AECT) defined educational technology as "the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources". It denoted instructional technology as "the theory and practice of design, development, utilization, management, and evaluation of processes and resources for learning".

S.Arul Immaculate Roseline, St.Ignatius College of
Education(Autonomous),Palkayamkottai,

As such, educational technology refers to all valid and reliable applied education sciences, such as equipment, as well as processes and procedures that are derived from scientific research, and in a given context may refer to theoretical, algorithmic or heuristic processes: it does not necessarily imply physical technology. Educational technology is the process of integrating technology into education in a positive manner that promotes a more diverse learning environment and a way for students to learn how to use technology as well as their common assignments.

TECHNOLOGY IN EDUCATION TODAY

Providing an equal learning experience anywhere, on any device As mobile devices and mobility solutions become more common amongst schools and with students, faculty and staff, education IT is facing a new set of challenges and opportunities. With an influx of new technology and devices, such as tablets, touch screen displays, 3D printers and even drones, schools are taking big leaps forward to provide the latest and greatest technology to their students. The challenge arises when IT and educators realize that this incredible technology essentially becomes a flashy, expensive toy without the right infrastructure, mobility strategy or learning plan in place first.

Another solution provider are striving to help schools bridge this gap and design a campus mobility strategy that takes advantage of the newest technology while also utilizing their legacy equipment. This type of strategy allows schools to provide an equal learning experience regardless of each student's socioeconomic status. When IT services and resources can work anywhere and on any device, it makes other critical technology initiatives—like BYOD, collaborative learning spaces, and flipped classrooms—easy to introduce and expand.

With programs like these in place, you increase learning continuity and reach students in completely new ways. If you can deliver any application, even heavy applications like AutoCAD and SPSS, to any device, whether it is a MacBook Air or inexpensive Chrome book, you level the playing field for education. In the past, if a student hoped to someday be an engineer, those dreams could easily be shattered due to the inability to afford the expensive software or device required for the classes. In addition, with anytime, anywhere access students no longer have to wait in line for a seat in the computer lab or risk walking across campus late at night.

The next level of IT responsibility will be to address student engagement and success through technology solutions and services. It is no longer enough to put a tablet or laptop in

every student's hand and expect them to instantly improve test scores and graduation rates. However, with the rise of the Internet of Things (IoT) we may begin to develop new ways to increase student learning and engagement and change traditional classroom pedagogies to be more effective.

Education Trends on the Horizon: The Internet of Things potential for improving student engagement

We can think in detail to many different colleges and universities both in the United States and globally, and what we wanted to gain from these conversations is insight on how the Internet of Things (IoT) can improve how colleges and universities engage with their students. In those conversations we learned that there is a lot of curiosity and interest in how IoT can simplify and enhance blended, or hybrid learning, with the goal of using IoT to automate much of the effort involved.

These conversations revealed that this would be no simple task, as we saw many different definitions and implementations of blended/hybrid learning across the range of colleges and universities that we talked to. Some of the schools define blended learning as a way to enhance the on campus experience by using asynchronous education and flipped classrooms to allow students and instructors to manage their time on campus more efficiently. We then heard from other schools that see synchronous learning as a great and efficient way to reach more students today, either by allowing students to access lectures from their home or by allowing content to be pushed across multiple campuses simultaneously. And finally we talked to those more interested in asynchronous methods to reach new students online with schedules too busy to support attending a traditional classrooms on a regular basis.

There are definite pros and cons to the different approaches, and what we saw in our conversations were schools using models best matched how they wanted to engage with their students, with everyone sharing the same goal of tracking and improving student outcomes. However, with all of this variation, is it even possible to define a solution that can help everyone?

This is a problem we think IoT can solve, but it depends on how you define IoT. This is not a problem a new automated gadget can simply address. Rather, it requires framing IoT as the Integration of Everything, thinking of IoT as a platform to connect together disparate elements within a hybrid learning environment to improve the instructor and student experience while not overloading the IT staff.

USING THE INTERNET OF THINGS TO CREATE THE CLASSROOM OF THE FUTURE

With that framework in mind, we started looking at how we could use IoT to help automate the classroom. Our goal is to use IoT to link together all of the classroom elements: devices, projectors, screens, cameras, microphones, lecture capture systems, learning management systems, etc....

Out of that linkage we can create workflows that allow instructors to simply walk into a classroom and teach the content they have prepared for the day. In the background we can have all of the classroom elements working together to support the presenting and capturing of the classroom content, which can then be provided to students in a synchronous or asynchronous fashion (whatever the college/university feels is most appropriate). The goal is to do this simply, allowing IT and instructors to define in advance their classroom preferences and to then automate the rest. Further simplifying making classroom content easily accessible to students, when and where they need it.

CHANGES IN EDUCATIONAL TRENDS

There are profound changes going on in the educational system. Almost every aspect of primary and secondary education has changed. These changes are needed because of ever growing pressure in the school systems themselves, partly because society itself is changing into one in which knowledge work becomes ever more important, and partly because of the very information and communication technologies which are transforming the economies. By confronting trends and technological developments, a new concept is emerged with a vision of a “global learning infrastructure” in which the role of schools and universities will be drastically changed, a radical transformation of the educational system. Major reasons behind these changes are:-

- Globalization and liberalization
- Changes have led to more flexible learning arrangements.
- Education is under constant budget pressure, thus there is a need for more efficient and effective education.
- There are too many dropouts in the current educational system.
- Demand for more professional and skilled employees is increasing.

Following are some of the examples of changes in educational trends:-

MOBILE LEARNING- Today’s students expect constant access to information-in the classroom and beyond. As educators all over the world are discovering, mobile learning has solved many problems. Students devour engaging, customized curricula when it’s delivered

on the iPod or iPhone. Audio and video podcasts let students study at their own pace, wherever and whenever they want.

ONE-TO-ONE COMPUTING- One-to-one computing means that every student or teacher is given to a computer, the internet and software anytime and anywhere. This way they can make maximum utilization of their time and become more efficient.

PERSONALIZED LEARNING- Personalized Learning is a unique, blended classroom-based and non classroom-based public educational model that is tailored to the needs and interests of each individual student. The key attributes that comprise the Personalized Learning model are based upon how students learn most successfully, including a strong emphasis on parental involvement, smaller class sizes, more one-on-one teacher and student interaction, attention to differences in learning styles, student-driven participation in developing the learning process, technology access, varied learning environments, teacher and parent development programs, and choices in curriculum programs.

VIDEO TRAINING- To enhance the quality of teaching and learning of pre-service training. The use of digital video was introduced. As a result of the use of video, trainees are able to improve their teaching performances in areas such as classroom management, group work, and motivation and presentation skills.

CONCLUSION

Institutions increasingly promote blended approaches to learning and, in parallel, are gathering data across all areas of the student experience. This workshop looks at the emerging relationship between data and learning design..We aim to help participants ensure that their blended learning designs are purposeful. We seek to make explicit the pedagogic intent in a learning design and explore how data can enable us to understand whether or not learner behavior is corresponding to those expectations..Leaders within higher education must develop strategies to address today's challenges and champion change within their institutions.

REFERENCES

- Khagendra Prasad, (2009) Information and Communication Technology in Education, Centrum Press, New Delhi
- <https://www.citrix.com>
- <https://en.wikipedia.org>
- <https://www.qs.com>
- <https://www.ukessays.com>

ABSTRACT

The quality of higher education is a matter of myriad state concern all over the world. Recently the use of technology have been practiced and explored to a greater extent in improving the quality of higher education. Social media is contemporary technologies which lament significant impact on components of higher education. The social media has become main communication medium to connect among family, friend, colleagues and peers to share information in many forms such as text, audio, video, image, pdf etc. to shares their views and feeling. Owing to popularity and comfort in use social media have penetrated to every quarter of higher education. Recently concluded researches shows that average global internet user spends two and a half hours daily on social media producing huge sum of data absconding the traditional data handling techniques at stake. Since these data potentially reflects user trend and hence are much useful for various purposes. The social media partners are making significant investments in putting this data to work because it gives the analysis of media content has been central in social sciences, behavioral sciences, education, research, marketing and policy framing etc. No doubt the majority of social media clients are youth who use it before anything else. Their performance and experiences such as study, eating, sleeping, and social habits, the course of study selected, passion and attitude towards instructor are impacted by it. Positive impact leads to improve their learning and skill out comes while negative impact may lead to problem of their retention and downgrade their results. This paper will discuss the need for quality assurance in higher education, benefits for the students and faculty. Based upon this a roadmap is suggested for future use of few new technologies to change the teaching and learning.

Keywords: Social Media, Higher Education, Quality Assurance, Quality Enhancement.

M.Sasikala Ph.D., Scholar, Manonmaniam Sundaranar University, Tirunelveli

Dr.V.Veliappan Assistant Professor, Manonmaniam Sundaranar University, Tirunelveli

INTRODUCTION

Social media generally refer to media used to enable social interaction. For our purposes, the term social media technology (SMT) refers to web-based and mobile applications that allow individuals and organizations to create, engage, and share new user generated or existing content, in digital environments through multi-way communication. Social networking is built on the idea of how people know, should know and interact with each other. It gives people the power to share their papers, making the world more open and connected. Nowadays, social networking has a vital influence on our live as it helps a lot in every field of life such as political field, economic field and educational field. However, this paper tries to highlight on the use of social networking in education and explain the advantages and disadvantages of using social networking of educational purpose. The overall scenario of higher education in India does not match with the global Quality standards. Hence, there is enough justification for an increased assessment of the Quality of the country's educational institutes. Colleges and universities are facing major changes as they navigate the 21st century and make decisions that will not only impact higher education but will also contribute to our country's future competitiveness in the global marketplace. This article identifies and evaluates outcomes from efforts to modify quality standards in higher education.

NEED FOR QUALITY ASSURANCE IN HIGHER EDUCATION

The quality assurance of higher education has become an important global trend. Nearly half of all countries worldwide have created quality assurance mechanisms, of one type or another, during the last decade or two. Due to the rapid expansion of higher education systems, there is now a more diverse range of providers of higher education, comprising public and private institutions, cross-border institutions and distance education organizations.

Globalization has brought with it an increasing level of academic fraud, or fake credentials. This increases the demand for trustworthy organizations that can establish confidence using quality assurance methods. The quality of public higher education institutions— has suffered in many countries due to economic constraints and a shift in priorities from advanced levels to basic education. There are strong expectations that quality assurance— mechanisms will ensure continuous quality control and improvement.

Quality assurance is linked to professional mobility, and a growing number of regional and international integration processes. This raises the need for more effective mechanisms for the professional recognition of higher education credentials.

Opportunities to use social networking in education - In the field of education, social networking sites offer a student the opportunity to connect with other students, educators, administrators, alumni, both within and outside his current institution. Scholars praise social networking tools for their capability to attract, motivate and engage students in meaningful communicative practice, content exchange.

BENEFITS TO THE STUDENTS THROUGH SOCIAL MEDIA

Smaller in size and/or scope group projects are best, as social media allows students to receive timely feedback from a number of sources. Students need to experience the beginning, middle, and end of a project. Student presentations distributed via the Internet can be viewed by a much wider audience on an on-demand basis. Students have different academic strengths and skill sets, and working together allows students opportunities to develop them to their project's advantage. Incorporating social media approaches in the course contributed to extending student learning to outside the classroom, as it was especially easy for students to form study groups. Students are to use social media as an academic resource. Class size needs to be limited to a reasonable number, if no graduate assistants are available.

BENEFITS TO THE FACULTY THROUGH SOCIAL MEDIA

The early use of social media approaches in a traditional college course changed the classroom behaviour of both the instructor and students. We noticed that role evolved from primarily a presenter of knowledge to more of a facilitator and mentor. This role change was also accompanied by changes in the pedagogy followed in the course as we had to learn how to set up and effectively use several social media approaches. Equally important, students grew from being passive to active learners. Lessons learned from these early attempts include the following:

Instructors must design time and opportunities for the use of social media activities into their course syllabi. Though this may initially be viewed as taking time away from important course topics, these opportunities are alternative ways to cover these topics and even a means for introducing additional topics. Both instructors and students need to realize

their roles in the course and behaviour in the classroom will change significantly. The complexity and number of student questions rose significantly, resulting in a much more dynamic learning environment. They must be open to learning and using new social media classroom approaches that extend and enhance instructor student interactions.

Instructors must realize that not all students will embrace every element of all social media approaches. Some students will initially feel more comfortable using just one or two approaches and will need time to expand their skill set. Incorporating social media approaches allows guest lecturers to participate remotely if necessary. Also, it allows instructors to incorporate

NEW TECHNOLOGIES TO CHANGE THE WAY OF TEACHING AND LEARNING

Wikis - A wiki is a collaborative web space where anyone can add or edit content that has already been published.

Really simple syndication (RSS) - RSS allows users to subscribe to news feeds originating either from blogs or more traditional web spaces like newspapers and magazines. The content comes to the reader instead of the reader having to retrieve the content.

Social bookmarking - Bookmarking sites allow users to save and archive entire web pages. This enables users to produce a searchable, personalized, Internet.

Audio/video casting (AVC) - AVC makes it easy to produce digital voice and video files and publish and distribute them over the Internet. It also supports basic, live-streaming television online.

Twitter - Twitter is a powerful tool for connecting with others and sharing content easily.

Social networking sites (SNS) - In addition to supporting wide area communication in both audio and video formats, SNSs help teach the network literacy that is required to navigate this new connection.

CONCLUSION

The use of social media approaches enhances the learning experiences of undergraduate business students. Their use caused both the instructor and students to realize their roles in the course and behaviour in the classroom had to change significantly.

ABSTRACT

Technology plays a vital role in present scenario in all fields. Certain innovation can be implemented in education system for improving their learning and development process. The trends and issues in educational technology are dynamic and changes with time. The current trends in educational technology have become the means of instructional delivery online the world over in the recent times. This paper tries to explain the current trends in educational technology and their relevance in teaching and learning with emphasis on the internet, e-learning, e-tutoring, outsourcing education and virtual library.

Keywords: E-learning, virtual reality, virtual library, artificial intelligence

INTRODUCTION

Technology is rapidly changing the way we live and collaborate. Education is lagging in terms of technology adoption. Education is something that can change the world in positive way. Education technology can help to eliminate current barriers of providing quality education to all across the world. We have compiled some of the key trends and technologies that can define trends for the coming year. Issues and trends in educational technology are not static. They are dynamic and changes with time. Computer has become the symbol of education and a means of instructional delivery in the recent times.

THE CONCEPT OF TRENDS

Trends are rarely specific reports on the truth, and an indicator of direction in a field, a programme, event or a phenomenon. Trends do not necessarily predict the future; rather they report current issues or status of things that develop over time. New trends appear from time to time and usually reflect on ongoing analysis of direction. Trends are therefore based on qualitative information.

V.Dharani, B.Ed Student, Sri Ram Nallamani Yadava College of Education, Tenkasi.

S.Suganthi, B.Ed Student, Sri Ram Nallamani Yadava College of Education, Tenkasi.

It could strengthen or weaken and new trends could emerge. In the field of educational technology, trends help us to see the direction we are heading to as it shows new ideas, facts, approaches, devices introduced and their application to better the education industry.

NEW TRENDS IN TEACHING AND LEARNING

- **E-LEARNING**

The emergence of internet connectivity has made e-learning a major trend in educational technology. E-learning is the use of electronic technology to deliver, support and enhance teaching and learning. E-learning occurs through the internet and intranet. It is an instructional delivery technique through electronic devices such as the computer using Web browser like Microsoft internet explorer or Netscape navigator. As a trend, e-learning is very useful in open and distance learning. E-learning, web-based learning or internet –based learning involves students and instructors who are widely separated geographically, who come with different backgrounds and who may not be able to have lectures in a traditional classroom schedule.

- **VIRTUAL LIBRARY**

Virtual library has become a major trend and source of information to online learners. The term virtual library is variously referred to as electronic library, digital library or paperless library. This term implies the use of modern ICT to collect, store, search, retrieve and disseminate information to large number of learners without limitation of time and space. Virtual library is therefore an electronic library provided online by a conventional library for learners to read books and access other digital archival collections.

- **MAINTAINING STUDENTS RECORDS**

In the current scenario, mark sheet of the individual students are maintained by respective universities. There is no way where any third party authority, employer can validate if marks or degree obtained by the student is valid and as per records of the university. Process of verification has to be done manually. Blockchain technology can help to eliminate such issues where information collaboration, validation can help to validate credentials of the student degree or marks obtained. Coming year would see more new concepts and ideas of collaboration oriented processes in block chain for education sector.

- **STORAGE OF CERTIFICATES OF THE STUDENTS**

Blockchain technology can also help to store digital copies of the student certificates in the distributed and collaborated environment. Each university can act as node or validator where any authority can validate student documents by requesting for verified

information of the students. Such collaborative approach can help solve many issues like lost of original degree certificates or marksheets, authentication of student education records etc.

- **PERSONALIZED LEARNING**

Traditional classroom based learning is becoming obsolete. Consider examples of online or on demand streaming services like Netflix, Amazon Prime etc. It is providing us personalized and on demand television experience. Similar to it, education delivery or learning process must be personalized. Traditional classroom based lecture process may not help each individuals. Every individual has some strength and weakness and pace of understanding particular topic is different for everyone. Personalized learning using technology is one of the trends that would dominate in the coming year.

ADVANTAGES OF PERSONALIZED LEARNING

- ❖ Ability to absorb topic and understanding increases due to personalized learning
- ❖ Personalized learning can help student to learn, understand topics as per individual speed
- ❖ It can be done from any location
- ❖ It is classroom independent.

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is the latest trend in the world today. Not only technology sector but all sectors including finance, manufacturing and healthcare are going to be revolutionized due to implementation of AI. AI can help providing detailed analysis of student performance in the examinations. Feedback from teachers (human) has some limitations in terms of ability to comprehend student performance while taking into considerations historical performance. Personalized learning and analysis of the learning is possible using AI driven assessments of the students.

REVOLUTIONS IN EXAM MANAGEMENT

Exams are still conducted in traditional manner with exam centers, exam invigilation, answer sheet evaluation etc. AI can bring lot of changes in current exam management. AI based proctoring or auto remote proctoring can enable institutions to conduct exam without any need of infrastructure or logistic. Remote Proctoring technology can enable students appearing for exam sitting at any location. Currently this service has been successfully adopted and implemented by higher education institutes and universities for conducting entrance exams.

STEAM AND STREAM

STEAM is an educational framework focused on the balance and integration of Science, Technology, Engineering, Arts, and Maths throughout the curriculum. The STEAM framework promotes inquiry based learning, collaboration, creativity, and high level critical thinking skills. In the STEAM approach, two or more disciplines or standards are combined to develop the inter- connectivity of content areas. The STREAM approach to creative classroom instruction promotes both academic rigor and relevance within a values-based framework.

VIRTUAL REALITY (VR) IN EDUCATION

Virtual reality is popular in gaming. Many other sectors have started using VR for many critical things. In classroom based lectures, Knowledge retention is lowest, but in case of audio/ video/ visuals, knowledge retention improves drastically. VR not only provides opportunity to see something but also experience something. Usually users need to wear 3D glass and experience something as if person is standing in front of that event/ scene etc. VR implementations targeted to education, training would see good growth in coming years.

CONCLUSION

Educational technology in the world over is still relatively new and experiencing rapid growth. The current trends identified here are means of acquiring education online. The awareness will enable those opting for distance learning to exploit the benefits of these trends. New technology makes the teaching learning process very effective and interest. It degrees the teachers workload and increase the involvement in teaching. The teacher should update their knowledge according to the change of the society. Then only the teachers can fulfil the students need.

REFERENCES:

- <https://kitaboo.com/ trends-in-educational-technology/>
- <https://www.globalacademic groups.com>
- <https://greengarageblog.org>
- <http://www.outsourcingtutorialservices.com>
- <https://www.researchgate.net/publication/321478876>
- <https://www.tojet.net/articles/v8i2/8212.pdf>
- <https://www.infodev.org>

ABSTRACT

Teacher education refers to policies and procedures designed to equip prospective teachers with the knowledge, attitude, behaviours and skills they require to perform their tasks effectively in the classroom, school and wider community. Teachers have taken on a more critical role than ever before in our knowledge based, technologically sophisticated, global economy, where educational dropouts and underachievers are consigned to secondary status. Accreditation's main goal is to assure that all students have competent, caring and qualified teachers. This paper deals the comparative method in order to get a deep understanding of teacher education accreditation process in different conscious of national difference, legal structure, private public involvement and the type of accreditation being offered.

Keywords: Accreditation, Attitude, Technology

INTRODUCTION

Accreditation is the process in which certification of competency, authority, credibility is presented. Accreditation is the act of granting credit or recognition, especially to an educational institution that maintains suitable standard. It is necessary to any person or institution in education that needs to prove that they meet a general standard of quality. It is a mandatory requirement under the Teacher Accreditation Act 2004 that teachers are accredited at proficient teacher level, and maintains that accreditation with the National Education Standards Authority (NESA) achieving proficient level accreditation is full accreditation as a teacher.

TYPES OF TEACHER EDUCATION

1. Pre-primary teacher education
 2. Primary teacher education
 3. Secondary teacher education
 4. Higher education programmes
 5. Vocational teachers training
-

P.Hajeeral, B.Ed., Student, Sriram Nallamani Yadava College of Education, Tenkasi

V.Muthulakshmi, B.Ed., Student, Sriram Nallamani Yadava College of Education, Tenkasi

PRE-PRIMARY TEACHER EDUCATION

Pre-primary teacher training courses are of various types i.e, Montessori, Kindergarten, Nursery, Pre basic etc, Minimum qualification for admission to this courses is higher secondary and the duration of the courses is one year. Many institutes impart training for two year. This training is a certificate or diploma courses conducted normally by state government. A couple of years back Punjab and Haryana conducted one year course in Pre-primary and Nursery Education Government evolved a two-year course leading to "Diploma in Pre-primary school Education". A number of institutions are being recognized by the Government to run this two year course. This course has been designed in the context of NPE 1986.

PRIMARY TEACHER EDUCATION

There has been a large scale expansion of such training school during five year plan, high general, the courses last for two years and the minimum qualification for entrance is Matriculation. The present trend is to prescribe higher secondary as the minimum qualification for entrance. Elementary Training (ET) schools were providing pre service training. Secondary Training (ST) Schools are meant for imparting pre service training to prospective are in-service teachers of primary. The basic qualification required for admission into the courses is HSC Examinations pass and duration is of two years.

SECONDARY TEACHER EDUCATION

Training colleges prepared graduate teachers for secondary or Higher secondary classes. It is normally one year courses with an emphasis on principles and methodology of teacher leading to be a degree. The minimum qualification for entrance is graduation.

HIGHER EDUCATION

- i) Two Year M.Ed., Courses.
- ii) Two Year M.A., in Education
- iii) Two Year Ph.D., courses after M.Ed./M.A.,(Education)

VOCATIONAL TRAINING

Specific training courses are organised for training teacher in technical subject. They are various courses and institution to prepare specialized teacher. These are as follows:

- a) One year Diploma in Physical Education (DPE).
- b) Training courses to prepare Teachers of Music, Dancing, Painting and Fine Arts.
- c) One year training courses to prepare teachers for Home Science.

- d) Certificate Course in Arts & Crafts.
- e) Courses for preparing specialists in the teaching of English, Hindi and Geography etc.,

BENEFITS OF TEACHER EDUCATION PROGRAMMES

It is possible that a teacher has completed his or her training and college education without learning new techniques. When this happens, the material becomes mundane, and does not adequately incorporate new techniques and technology that may be available.

1. Learn latest techniques
2. Discover class room technology
3. Network with other education professional
4. Improve teaching skills
5. Gain experience

TYPES OF ACCREDITATION

There are two main types of accreditation- institutional and programmatic.

Institutional accreditation reviews educational institutions, while programmatic accreditation reviews specific programmes within institutions. There are also two branches of institutional accreditation- regional and national.

REGIONAL ACCREDITATION

Regional accreditation is the most highly regarded form of accreditation. Broadly speaking, it covers public and private, non profit and degree-granting, two- and four-year institutions. Eight regional accrediting agencies, such as the New England Association of Schools and Colleges, focus on one of the six U.S. regions-West, North West, North, Middle, South, and New England. Altogether, regional accrediting agencies oversee nearly 3,000 institutions and assure quality education to over 17million students across the United States. Such narrow focus within a region allows closer oversight and stricter accreditation standards than that of national accreditation. Committee chairs, Executives, Staff and volunteers regularly meet with other regional accredited to discuss policies, practices and plans.

NATIONAL ACCREDITATION

National accreditation oversees specialized and non traditional institutions nationwide like vocational colleges, technical colleges, religious colleges, and on line universities. Unlike regional accreditation, national accreditation focuses not on a region of the United States, but the nation as a whole. Although national accreditation is generally well regarded, some regionally accredited institutions do not accept credits from nationally accredited institutions.

PROGRAMMATIC ACCREDITATION:

Programmatic accreditation oversees individual programmes, departments and school within institutions nationwide. Some programmatic accrediting agencies also accredit specialized, free standing institutions. Sixty one recognised accrediting agencies and professional associations like the Commission on English Language programme Accreditation and the American Dental Association accredit over 19400 programmes in various field- the Arts, business, education training, law, engineering, social work, personal care services and health care.

ACCREDITATION OF PRIMARY AND SECONDARY EDUCATION

In the United States, there is no federal government list of recognised accreditation agencies for primary and secondary schools like there is for higher education. Public schools must adhere to criteria set by State Government, and there is wide variation among the individuals state in the requirements applied to non –public primary and secondary schools. There are six regional accredited in the United States that have historically accredited elementary schools, junior high schools, middle schools, high schools, as well as institutions of higher education. Some of the regional accredited, such as, Middle States Association of Colleges and Schools, New England Association of Schools and Colleges, Western Association of Schools and Colleges advanced, and some independent Associations, such as the Association of Christian Schools International and Council of Islamic Schools of Northern America (CISNA), have expanded their accreditation activity to include schools outside the United States.

HIGHER EDUCATION ACCREDITATION

Accreditation of Higher Education varies by jurisdiction and may be forced on either or both the institutions or the individual programs of study. Higher education accreditation in the united states has long been established as a peer review progress co ordinate by accreditation commissions and member institutions.

IMPORTANT OF ACCREDITATIONS

The goal of accreditation is to ensure that education provided by institutions of higher education meets acceptable level of quality. Accreditation is important because it,

- Helps determine if an institution meets or exceeds minimum standards of quality
- Helps students determine acceptable institution for enrolment.
- Assist institutions in determining acceptability of transfer credits.

- Helps employers determine the validity of programs of study and whether a graduate is qualified.
- Employers often require evidence that applicants have received a degree from an accredited school or program.
- Helps employers determine eligibility for employee tuition the reimbursement programme.

CONCLUSION

The purpose of accreditation is to create a set of standards for all institutions of higher education to be held to, while also encouraging schools to be the best they can be. Further, accreditation aims to ensure accountability of schools and degree programs in order to boost public trust and confidence. Teacher education is not exception to this. The teacher is to move from traditional to contextual learning, familiar with new equipment, strategies, expectations, skills and roles. Therefore it is very essential to make teacher of all levels professionally trained and competent.

REFERENCES

- <https://education.stateuniversity.com>
- <https://en.m.wikipedia.org/wiki/ accreditation>
- <https://www.paralegal.edu/blog/teacher>
- <https://magoosh.com> (2018)
- <https://www.academic.edu.com>
- <https://www.cfc.ca.gov/docs>

ABSTRACT

This study helps to acquire the modern scientific approach in education which helps the learner to learn effectively. It explains the various modern trends that are available as open sources on the internet. The basic level of education has been changed to computerized learning and the teacher must learn the digital teaching pedagogy. Teaching becomes more vibrant and more realistic than before and it is possible through the Information and Communications Technology. By referring this paper a teacher can learn the modern methods of teaching in the classroom, a teacher could initiate this technology in any classroom, it also helps the teacher to observe the student's capability individually and helps to assess the student's performance in a short period. Through this emerging technology, a teacher can acquire the necessary study materials by downloading from the websites, by copy-paste from the permitted blogs, etc. Study material could be available 24 x 7 for all the student beneficent and a teacher could edit or allow the other teacher to modify or continue with the content throughout the digital components. It is true that education is evolving to digital formation, gradually.

Keywords: Digital, Education, Teacher, Online, Learner, Students, E-content, Digital

INTRODUCTION TO DIGITAL TOOLS

Digital tools, that are directly referred to a computers, which we work in our routine life. Digital tools that started to replace the stationeries. Computer with internet facility is bliss for the learning environment. Modern learners are eager to learn through technology rather than a face to face classroom teaching. With the help of the internet, classroom teaching becomes easier than the conventional method of teaching. Generation of learning becomes more interesting and by learning through digital gadgets the learner feels updated. The notebook has been added in the smartphone application and it stores the en number of data in text, audio, and other formats.

Prince Antony J, Assistant Professor and Head, Department of Hotel Management and Catering Science, Valluvar College of Science and Management, Puthambur (p.o), Tamilnadu, India – 639003.

A learner may think that they have all the necessary data about the topic which the teacher is about to deliver. Assessment becomes quicker than ever by using digital tools. Multiple Choice Questions (MCQ) are a quick method to assess the learners' learning ability. Digital education is an ethical, organized, standard, step-by-step process, individual evaluating, creative presentations, worth discussions, and systematic feedback.

DIGITAL RESOURCES FOR EDUCATION

Education is a continuous process and the learning speed of the learner may vary in many situations. Keeping in memory and the ability to complete the work have little differences. Opportunities always seek a trained mind rather than theoretical memory. Digital education develops the intellectual skill of the learner by providing determined study content in the form of audio and video. It is proven that our memory could easily understand the concept while we study explained through the images like charts. Apart from the blackboard digital education has an enhanced projection of colour and proportion of the content to the learner. Digital content could be enlarged or concentrate by the editors and it helps the learner to know where to begin before the understanding.

ONLINE RESOURCES

Online resources become widespread in the service of education. Online resources are longer available on the websites and help the learner to download at any time anywhere from his internet-connected system or smartphone. Thus make the data in the hands of learners where they could share and discuss with other learners and teachers. Online resources include study papers, information websites, e-book, social blogs, forums, etc. Few online resources are recommended by the University Grand Commission and often verified by the universities in India. To make the study content online the teachers were trained with basic computer skills and cast abilities like a classroom. It is a creative art of the teachers; the University Grand Commission has set eligibility and standard guidelines to prepare these online content and for the upload. Through the MOOC platform teachers could create a course and add students in it, they can schedule the course which contains the quiz, assignment submission and other types of assessment. They could examine with the help of computers at the end of the course or the successful completion of the learner. Online resources are a soft copy of texts, audio files, and video files. The teacher could record his lecture through the video camera and later edit with the free available software for final uploading.

MCQ ASSESSMENT

Multiple Choice Questions are the great assessment model that could easily assess the student to understand the level of learning at the end of each unit or each week. These questions will be prepared by the teacher towards a particular unit or lesson; questions can be shuffled if it is needed during the exam. Students could attend this exam at a particular time or they can open the question at any time but they should complete it within the duration. Multiple Choice Questions are easy to prepare and the results can be viewed by the candidate after attending the question or at the end of the exam.

DIGITAL FORUM

The digital forum is similar to the group chat where the teacher is centered. Like a Whatsapp group, the teacher can create a forum by using the internet. The teacher puts the title or topic related to the units and sends the announcement to the students to respond. This forum could be scheduled by intimate the start and close time. Learners could be evaluated by the teacher by providing marks for the salient points. If the two same points displayed by the two different learners, the teacher could take the first submission for the marks. This could be done by monitor the date and time of the submission. Minutes and Seconds of discussion can be considered by the teachers during this submission. It helps the learner to listen to others' content and it also inspires internally to submit his view that based on the outcome of the lesson.

SCREEN CASTING CLASSROOM

Creating a video file from the lesson content and it is done by recording with the video camera. Instead of download the related video from the online resources a teacher can record his or her self teaching video with own voice. This is more of like a classroom teaching to the learner. It is also satisfying the face to face teaching to the students and the students could facilitate the content by listening to the video lecture of the concerned teacher. This video could share with anyone by email or other sharing applications available in the present days. The learner will listen to this video at any convenient time and day. The video lecture could be paused, replayed and play at many times for the different level of understanding of the students

FILE FORMAT

Digital files have no boundaries like text files, the study materials can be any format that learners could understand easily and more conveniently. JPEG file format helps the students to understand the whole theory in the picture, Mp3 audio file formats help the students to hear the lesson content and able to hear in their relaxed environment. Audio

study materials successfully enhance the word and to know the actual pronunciation of it, aids the students to repeat after they hear the audio files. Video study materials are a more prominent feature that the student could easily understand the lesson, able to learn the way of presentation and more precise they learn from their teachers as their classroom teaching.

VERBAL AND E-CONTENT

Open content describes as it is open for all, multiple teachers could join in the development of e-content. More teachers together can provide valued study materials for the learners. Each word and sentence will be displayed to the learner, thus makes the content more reliable and it should be carefully compiled towards the outcome of the topic. Errors can be easily found before uploading to the students and very easy to publish digitally. It eliminates the printing and binding of books manually. It also eliminates the time of production of study materials. E-content could be modified by the authorized authors by the single-window editing method. The students don't need to wait for the revised version of the study material arrival. Carrying the data makes more simple and economical, a pocket data drive could store the entire syllabus and study files in a single copy, cloud computing makes this easier nowadays. The data can be transported in single minute.

PLAY AT ANYTIME

Audio and Video files can be viewed multiple times and it is easy to listen. In traditional classroom teaching if a student is absent for the day or an hour he or she may miss that lecture if it is the video lecture the students never miss the teacher's lecture. Through the digital learning the classes never missed, the learner will be more comfortable in learning, the files can be played at any time and anywhere, these file formats can be viewed on the smart phone screen also by the learners.

EASY TO COPY AND SHARE

Study materials are simple and easy to copy and share from the teachers to students or students to students. Mp3 audio files and Mp4 video files are common file format and it can be uploaded in the You tube and later the link could be shared with the learners. Instead of carrying the books to the classroom the learner could take the entire data and study material in his portable drive or they can store in permanently in the cloud drive.

EDUCATIONAL BLOGS

Educational blogs are like knowledge sharing websites. The teacher will inform the students about the usage of blogs before the course starts. The teacher can publish the content, it could be an assignment or the teacher could publish the study materials through this blog. Blogger can be used for announcements of exam schedules and other instructions

to the students. Teachers can allow the students to publish their content in their blogs and they can comment and discuss the submission. Inside these blogs, a user can include various file formats and charts in between the study content. Google blogs are more user-friendly other than that there are three more free blogs for teachers and students; they are Edublog.com, Kidblog.com, and WordPress.org. Edublog.com is a well-known site for teaching blogs. This blog allows the teacher to create and manage resources. Users can easily alternate the layout and even add photos, videos, and podcasts. Kidblog.com is active learning, easy publishing platform designed for grades k-12. It's free for up to 50 students per class. There are additional features that include no advertising, privacy, password-protected, no personal information needed from students, and simple to use so students spend more time publishing.

WordPress.org is a free blogging site and a comfortable choice and can be used as public. The domain name id is free. Although not as simple to use as platforms designed specifically for educators, it has some good features, such as numerous plug-ins that allow the teacher to do almost anything you want with the blog. Teacher can create a blog and its available free.

FLOATING DATA BY CLOUD

Through the cloud storage system, the students and learners could access the data from anywhere and anytime. At any time the management of the educational institutions, teachers of the particular subjects, learners or the students and even their parents could able to access the data and resources for quick reference. The files can be protected by allowing the authorized person to edit or modify the content. Authorized persons can be the teachers and they will be provided with user name and password to access some salient features. Cloud access needs an internet connection, the changes can be done offline and it will be updated when it comes online.

PICTURES AND OTHER FILE FORMATS

Pictures are digital outcomes and that enhances the experiences of learning in students. Instead of providing the text content in large, some explained pictures could help the students to understand comfortably. Pictures are easy to create and occupy a little space for storage. Other than pictures audio files can be recorded through the original voice of a teacher and video can be done through the video recorder. These pictures and video files can be categorized under a specific topic easily in educational blogs. The picture can be a photograph, poster presentation of a chart. Before producing the picture or other digital file formats the teacher should remember the age and eligibility of the learner. This will help the

teacher to create a digital file that will better communicate with the students. Allow the students to create the poster and poster presentation could be the assignment.

CREATING AN ONLINE QUIZ

The name online refers that the quiz is available to all users. It is not necessary to consider the number of students and the size of the classroom. Online is entirely good to conduct quizzes for the learners. Some software is available on the internet where the teacher can create a quiz and send that link to the learners through text messages or e-mail. The result can be displayed under each question after the student answer it or the result will be displayed at the end of the session. The well-known quiz making software is Kahoot!. It is fully online, a teacher could create ten to twenty questions in various formats online and he or she can conduct the quiz to an number of students by using their computer or by their smartphone. To learn about more free open source software to create quiz please refer the following <https://www.hongkiat.com/blog/online-survey-tools/>

TYPES OF QUESTION

Before creating the Online quiz the teacher should remember the types of questions available in the free open-source software. Multiple Choice Questions know as MCQ has many types. Some questions can be in the format of True or False, Create questions to find out the Odd one out, create options to answer the combined, example the answer is a) & b). The questions can be created by observing the picture, listening to the audio and viewing the video files.

DIGITAL SURVEY

This is the easiest way of creating a survey and generating a report within a short period by using digital tools. It is proved that this digital method consumes less time to create and generate reports from different people and different locations. Economically the digital surveys cost less money when compare to the manual or traditional methods of surveying. After we received the response the digital method is easy to access and assess the data. More of the comfortable the accuracy of the reports is very good because it directly receives the content from the user.

DISPLAY RESULTS

The digital method of analyzing and assessing is so simple and efficient. Instead of calculating the marks manually the teacher could allow the system to calculate automatically and displayed to the students in common format or an individual copy like a mark statement to their email. Certificates can be generated after the successful completion of the course or the recommended marks obtained by the student in their examinations.

CONCLUSION

The students may indeed think to have smart and digital learning methods in their classrooms. Change is necessary for the method of teaching and learning. In every generation including the past from the student's mentality, everyone had a wish to have an updated technology for the learning. The teachers must understand the necessity of using digital tools in their classrooms in future teaching. The teacher should understand the role of making resources available to the students. Making resources online is a part of a teacher's job description. Every script and study material that crafted by the teacher towards the syllabus are assets to the institutions. Basic computer skills are enough to understand the free open educational software. Copy-paste and modify is allowed in many resources, which helps the teacher to decide the content as study materials. By using the digitals aids teacher could be smart teachers at any time in the classroom. Before start learning the digital methods of teaching the teacher should unlearn the traditional practices of teaching, for example expecting the students to write the same answers or from a textbook.

REFERENCES

- Cloud Computing for Education: A New Dawn?, International Journal of Information Management, Sultan, N. (2010). — 30, 109–116.
- Digital Learning: Strengthening and Assessing 21st Century Skills, Grades 5-8
- By Ferdi Serim Digital Resources for Learning, Springer Texts in Education,
- D. Churchill, Springer Nature Singapore Pte Ltd. 2017
- E-Learning: Strategies for Delivering Knowledge in the Digital Age
- By Marc J. Rosenberg
- Empowering India through Digital Literacy, Monograph by Dr.R.Babu, Dr.S.Kalaivani and Dr.K.Saileela Going Online: Perspectives on Digital Learning
- By Robert Ubell Handbook of Research on Inventive Digital Tools for Collection Management and Development in Modern Libraries by S.Thanuskodi, Alagappa University, India.
- BalaKamalakhara «The benefits of Cloud computing »,January 30th, 2014.
- Optimizing Open and Distance Learning in Higher Education Institutions edited by Umesh Chandra Pandey, Idira Gandhi National Open University, India and VerlaxmiIndrakanti, Anand Vihar College for Women, India.Video in the Age of Digital Learning Jonas Köster Springer, 01-Jan-2018.

ABSTRACT

Moral values have always been at the core of all major religions in the world, and the dark realities of our times call for greater emphasis and assertion of such values. The child as a member of the group imbibes the attitude, values and general behaviour of the group and continually tries to mould himself according to the group norm. Such adjustment to life constitutes his moral development. Moral development includes both thinking morally & behaving morally. Moral thinking is a distinct type of thinking characterised by the exercise of rational choice. A moral person is not only a person who does the 'right' thing for the 'right' reason. To be educated in the real sense of the term is to be able to think. Right, to feel the right kind of emotions and to act in the desirable manner.

Keywords : Values, Moral Values, Attitude, Education

INTRODUCTION

Values are attributes that spring from the sublimity of soul. Values are concepts that conserve life that comfort life, that promote life, protect life and protect life. They foster peace, order, dignity, beauty, grace and delight. Values in short shape the moral personality of an individual. They enhance the finer side of his potential. They help him live harmoniously and graciously with his fellowmen. They act as the conscience of the community which when kindled with torch of learning would make him realise the responsibility he owes to the society. Values in one word are the divine side of man.

VALUE EDUCATION AND ITS OBJECTIVES

Value education is the programme or component of the formal secular moral education which aims at inculcating proper human, social, cultural environmental and developmental values and forming proper and balanced attitudes in the members of the younger generations, in keeping with the demands of the modern and future society – national as well as the global society According to R.R.Singh, the following should be the objectives of imparting Value Education to school and college students

S.Christabel Bobby, Assistant Professor of Mathematics ,St.Ignatius college of Education Tirunelveli

- To train the students to earn their livelihood
- To inculcate empathy, friendliness and mutual respect among students
- To care about people, nation and the society
- To enable students to translate habit of discipline among students
- To impart moral knowledge consisting of what is approved and what is disapproved
- To develop among students the importance and essentiality of moral behaviour
- To make the students upholders, defenders and zealous propagators of the concepts of Human Rights, Human Dignity and Global Peace.

NEED OF PROVIDING VALUE EDUCATION

The need & importance of imparting such a progressive, balanced and functional model of value education very urgently in India lie in the following points.

- Need for character formation and development of morally autonomous personality of the student
- Need to develop balance and co – ordination between traditional and modern values in the student's mind
- Need to develop perfection in the students life
- Need to have proper values and attitude towards parents and all elders in society
- Need to have concern for peace, harmony and spirit of co-operation in all social groups
- Need to develop proper sense of discrimination in the student's mind to help him choose what is moral for him and for the emerging natural society.
- Need to have proper and dignified attitudes and values towards the members of the opposite sex.
- Need to ensure the cultural enrichment of the individual.

ROLE OF TEACHER AND PARENTS IN IMPARTING VALUES

House is the first learning environment for the child and parents are the first teachers. They not only guide the child in its progressive path but also demonstrate the appropriate behavior by their actions. Handling of a child by the parent should be with an iron hand in a velvet glove. We have seen many children who defy all systems and become too selfish. The impressions that the child gets in the initial part of his life, remains with him what a person becomes when he grows up is very largely determined by the upbringing, what the parent did is more important than what they said because the child learns by observing and not just by listening. Parents have no options but to become role models.

RESPONSIBILITIES OF TEACHERS

Teaching is not a job. It is an attitude. Teacher is a source of information, a guide, a mentor, a motivator, a surrogate parent all at the same time. The role of a teacher in the changing social scenario is becoming very challenging. In the earlier times teacher was the only source of information and commanded respect on his count. We are at a transition time during which it is essential that the values are maintained and nurtured. Only an ideal teacher whose life itself is a beacon light of values can lead a society on the right direction. He has to demonstrate the essential values such as optimism, motivation, willingness to learn and teach truth, creativity and ability to demonstrate unaddressed love. This is tall order. But, that is the responsibility that the teacher must take in order to be an effective catalyst for social change.

INCULCATION OF VALUES

Apart from direct value education in specially provided periods there are several other sources of value education and all these are to be judiciously used. The regular subjects of the school curriculum have hidden in the discipline structure and methodology a set of values, attitudes and dispositions which are characteristics of them. The proper teaching of a subject involves not only passing on the information content but also inducing in the learner the qualities of mind and heart involved in the pursuit of the discipline. All education in a sense, is value education for education is nothing but a process of transmission of knowledge, skills, attitudes and values that we think as desirable for the younger generation to have. The text book in value education need not take the form of a collection of lessons like text books in other subjects but can be organized as a hand book of various kinds of activities with objectives and teaching learning strategies for the use of students and teachers.

CONTEMPORARY CHALLENGES BEFORE VALUE EDUCATION

- Political Anomie
- Growing close nexus between politician & criminals
- Growing tentacles of corruption
- Growing trend of privatization
- Globalisation
- Our dysfunctional democracy
- Diminished Dignity's and power of teachers
- Too much importance being given to money

- Serious conflicts between traditional values and modern values
- Growing Egocentrism and Assertiveness of the youth
- Weakening of the socialization role of family.

CONCLUSION

Education inculcates in a child higher moral and social ideals together with spiritual values so that he is able to form a strong character useful to his own self and the society of which

he is an integral part. It sublimates the animal basic instincts in a child to socially useful activities, habits of thinking and behaving Education infuses in the child a spirit of dynamic citizenship which eggs him on and on in the service of his nation keeping into consideration the international understanding and well being of humanity as a whole.

REFERENCES

- Singh.Y.K.(2006) "*Value Education*" New Delhi : Efficient offset printers.
- Bhardwaj.T.R(1999) "*Education of Human Values*" New Delhi : Mittal Publications.
- Singh.M.S.(2007) "*Value Education*" New Delhi : Town offset printers.
- Venkataiah.N.(1998). "*Value Education*" New Delhi : Efficient offset printers.
- Chakrabarti.M.(1991). "*Value Education*" New Delhi : Nice printing price.
- <https://www.career360.com>
- <https://indiacelebrating.com>
- <https://www.universityhomeworkhelp.com>

ABSTRACT

This paper focus on vocational education for sustainable growth , a initiative which is a must for all types of students for sustainable growth in the educational as well as vocational field. Vocationalization refers to efforts taken by schools as well as colleges to include in their curriculam those practical subjects which are likely to generate among students some basic knowledge ,skills and dispositions that might prepare them to think of becoming skilled workers or to enter manual operations. Its main objective is the proper and complete utilization of a nation s man-power through helping the individual to achieve his development and satisfaction in his profession. For sustainable growth in education, quality vocational education is very essential, it ensures the overall development of an individual by rendering enough opportunities for selection of higher education and better vocation which suits the individual . it is a career and technician education which benefits the individual.

Keywords: Opportunity,Vocationalization,Suatainable

INTRODUCTION

For quality education ,vocational education aims at solving problem related to individuals progress and vocational selection keeping in mind the individuals peculiarities or special abilities and their relations with his occupational opportunity . Education and training for productive employment is vital for economic and social development in Asia and the Pacific . Technical and Vocational Education and Training is viewed as a tool for productivity enhancement and poverty reduction in the region.

BENEFITS OF VOCATIONAL EDUCATION

- Better chances of employment
- Higher earning levels
- Increased job satisfaction
- Improved flexibility and mobility
- Lifelong learning
- A positive influence on child education in families
- Helps in mental health and social benefits
- It helps build competencies
- Offers insights in area of improvement
- Flexibly adapted to the students need

UTILIZATION OF HUMAN POTENTIALS

Quality education triggers the energies and capacities which is not well utilized. This non-utilization destroys such energies and capacities by appointing un-skilled persons on the basis of casteism, recommendations, corruption, defective evaluation and bribe. vocational education helps in order to make proper use of persons energies and capacities

OBJECTIVES OF VOCATIONAL EDUCATION

- To tell the pupils in the schools about the individual and social importance of various vocations by introducing them with those vocations
- To inculcate the feeling of idealism towards some vocation by introducing the pupils with the vocations
- To develop the capability and ability of analyzing the information related to vocations in the pupils
- To introduce the pupils with various vocational training centres
- To meet out the needs of poor students by providing them vocational informations.
- To introduce the pupils with the fact that what type of persons are required for some particular vocations and what type of vocations suits a particular type of personality
- To provide assistance to a person to develop proper conditions after selecting a vocation
- To provide facilities to observe different vocations
- To create such belief among the persons that the workdone with honesty is always the best
- To provide various opportunities to the pupils in order to make their interests comprehensive
- To explain the pupils how they can render social service through vocations
- To tell the people how they can acquire self-satisfaction

VOCATIONAL EDUCATION AND TRAINING FOR SUSTAINABLE DEVELOPMENT

- Vocational Education and Training {VET} is an important tool for a countrys social and economic advancement. It offers an alternative educational path for youths and adults who wish to grow professionally, and at the same time provides qualified manpower needed across all sectors of the economy
- VET comprises formal, non-formal and informal learning for the world of work. Young people, women and men learn knowledge and skills from basics to advanced levels across a wide range of institutional and work settings and in diverse socio-economic contexts.
- VET has a prominent place in the 2030 Agenda for sustainable Development. Equal access to affordable, high quality VET is a target of the sustainable Development Goals together with a commitment to substantially increase the number of youths and adults with the relevant skills for employment, decent jobs and entrepreneurship by 2030.

- VET programme will be key to achieving both the 4th SDG, on good jobs and economic growth .
- In Europe , VET has experienced periods of intense policy innovation. Over the last decade, almost all European countries have introduced a national qualification framework and quality assurance systems.
- Germany, Austria and Switzerland are well known for their successful VET models, which are supported both by the private sector and by the government. The dual education system practiced in these countries combines an apprenticeship in a company with education in a vocational school in one single course.

VOCATIONAL EDUCATION STATUS IN INDIA

- Vocationlization of education without due seriousness
- Lack of teachers for imparting instruction according to the vocationalized aspects incorporated in the general curriculam
- As Education Department of the Government has not been able to receive guidance for determining the exact nature of the vocationalized curriculum, the vocationalized education programme could not be formulated according to the social and national needs
- Due to lack of necessary facilities in schools and training colleges, laboratories and workshops have not been satisfactorily organized and the required number of trained teachers is not available.
- The universities neglected altogether the programme pertaining to physical work and social service. These could not get adequate encouragement from schools, colleges and universities
- There has been a lack of co-operation between labour, industries and education departments of the Government. No department wholly took the responsibility of vocationalized education on its own.
- The public remained altogether indifferent to vocationalized education as its utility has not been fully explained to people.

VOCATIONAL EDUCATION TO INHERENT QUALITY EDUCATION

- Education should be both quantitative and qualitative. We have made quantitative improvement in technical and vocational education, we have to pay adequate attention to its qualitative side. There should have construction of good workshops, laboratories libraries and buildings.
- Opportunities should be given to students and teachers in schools ,colleges and universities for doing various types of creative manual work. Work shops should be organized to give enough practical experience to each trainee. More time should be allowed in the time-table for practical work. It should be corresponding to capacity and interests.
- It should be estimated as to how many teachers and guides are required for a particular stage of technical and vocational education. The arrangement for the equipment should be made on the basis of this estimate. The teachers and guides should be given attractive

salaries and other facilities. The four regional committees established in the country should take the responsibility for doing the needful in this matter.

- Regional language should be accepted as the medium of instruction in the technical and vocational institutions. The trainee should be compelled to acquire proficiency in English.
- Many of technical and vocational education will be automatically solved by solving the problem of its administration and control.
- A council of technical and vocational education may also be organized for looking after the various implied issues.
- The research work in the field of technical and vocational education should be carried out according to the needs and conditions in the country. The Government should set up various types of experimental laboratories and research centres. The researchers should be given handsome stipends in order that capable persons may be attracted towards the same.
- The problem of post-education and training may be solved through correspondence courses, part-time course, close contact with the technical institutions and industries, short term courses or refresher courses.
- No doubt, India should modernize her technologies but she will have to Indianize them as well according to her own conditions and needs. The technologies should be modernized in such a way as to obtain the maximum production by using the minimum manpower, capital and raw materials
- The man-power should be properly utilized and the maximum number of people should get employment. The difference of rich and poor, owner and labourer and the exploited should be eliminated.
- An estimate of the manpower needed for the various areas should be made for obtaining a balance and co-ordination between the technical facilities and job opportunities.

CONCLUSION

The council has adopted vocational education for sustainable development. The Council invites member states to support education for sustainable development by featuring it in national lifelong learning strategies and by equipping teachers and trainers with the knowledge, skills and attitudes required. Good quality education is an essential tool for achieving a more sustainable world.....

REFERENCES

- Bedir, Hasan, 2019. Pre-Service ELT Teachers' Beliefs and Perceptions on 21st Century Learning and Innovation Skills (4Cs), *Journal of Language and Linguistic Studies*, 15(1), 231-246.
- Blood, R, 2002. *The blog handbook: Practical advice on creating and maintaining your blog*. Cambridge: Perseus Publishing.
- Dayag, J, 2018. Reaching out: Facilitating EFL learning through Edmodo. *International Journal of Advanced Multidisciplinary Scientific Research*, 1(2), 1-7.

- Dayag, Joseph Decena, 2018. EFL Virtual Learning Environments: Perception, Concerns and Challenges, *Teaching English with Technology*, 18(4), 20-33.
- Dhonau, Stephanie, Ed, 2013. MultiTasks, MultiSkills, MultiConnections. Selected Papers from the 2013 Central States Conference on the Teaching of Foreign Languages, *Central States Conference on the Teaching of Foreign Languages*.

ABSTRACT

The technological revolution holds great promise for education. Technology in communication, image and data processing is evolving at lightning speed, while also becoming cheaper and more reliable. The consequences for education are enormous. Technology has gone from being a set of solution in search of a problem to increasingly offering precise and well-defined potential for education. A technological revolution in education is becoming possible, even though it has not yet happened. Technology based education must help to build higher – order cognitive abilities, strengthen processes of inquiry, enable collaborative problem solving, and prepare people to compete in global markets and become productive members of democracies. Technologies are an important part of these approaches and strategies.

“Teaching in the Internet age means we must teach tomorrow’s skills today.”

Keywords: Digital Learning, e-learning, Technological

INTRODUCTION

Current period is termed as digital age in which the information technology has resulted into major transformation in education, services, work and business practices. In the perspective of higher education, the IT based digital intervention has led to the situation where access is no more a challenge and the knowledge is ubiquitous. The on-going expansion of higher education for realizing the targeted gross enrolment ratio of 30 by 2030 has made the situation precarious due to unavailability of good quality teachers in requisite numbers and desired infrastructure support.

M. Gnana kamali, Assistant Professor of Computer Science, St.Ignatius college of Education, Tirunelveli

Dr.K.C Bindhu, Associate Professor and Head of the Department, Mothers terasa Womens University, KodaiKanal

A look in past indicates that this challenge of quality and infrastructure was realized many decades ago, when video lectures used to be recorded in video cassettes and then in CD ROM for mass usage, which has evolved into e-learning content and YouTube videos due to technological development. Digital learning technology increases student engagement in course, barrier free access to learning materials and the use of adaptive technology in digital content shows definite improvement in their performance. In recent past, number of digital learning platforms have come up and are being successfully used by students and teachers alike. The degeneration in the class room teaching quality due to non-availability of teachers in both quantity and quality has made it inevitable for the students to look for good quality learning resources through different e-learning platforms like edX by Harvard and MIT; Connect , ALEKS -adaptive artificial intelligent learning system, Learn Smart, Create etc. by Mc Graw Hill, NPTEL and online courses by IITs and top Universities of world, Coursera. As per a report, the India's education market is likely to grow upto \$180 billion by 2020 due to the expanding digital learning market and the demographic dividend. The share of digital learning market alone is likely to go up to \$5.7 billion by 2020 due to fast expanding number of internet users, which may reach around 550 million by 2020 with about 40 percent penetration in the country's population. Thus, it is obvious that there exists congenial atmosphere for growth of digital learning and its critical evaluation in the context of our nation is the need of hour. Some of the positive features of digital learning are as :

ACCESS AND EQUITY

Online access to similar learning resources offers the biggest advantage of all time access to all irrespective of their location, race, religion etc. i.e. it is barrier free and of same quality for all. It results in availability of learning opportunity to every human being on this planet earth without any discrimination and every society/community/nation can march ahead for knowledge driven growth. Also, the different learners with different learning capability can access the learning resources as per their capability and limitations.

AFFORDABLE

Digital learning is quite affordable as the major cost is usually incurred in the initial phase of setting up of digital learning platform and populating it with learning resources while, the recurring cost of providing access, its maintenance and up gradation are not that large with the prevalent technological solutions. This less price for good quality learning resource with lot of ease makes the digital learning very attractive.

BETTER ENGAGEMENT

The use of technology in digital learning has an attraction in presentation, and content, which is loved by the learners and leads to their better engagement. It also permits for use of gamification in learning, which really fascinates the learners.

COLLABORATION

Uniform availability of digital learning resources creates ample opportunities for collaboration and networking amongst different learners and teachers even without meeting physically.

CAREER DEVELOPMENT

Digital learning resources facilitate those with the quest to learn at any span of their age and build their career suitably as per the changing industry/society requirements.

FORMAL AND INFORMAL EDUCATION

Digital learning platforms integrated with certification based on testing through learning assessment tools have potential of being used for both formal and informal type of education.

MENTORING

Conventional formal education system is limited contact type education system and the students fail to get the mentoring as per their need. The digital learning platforms are evolving with the facilitation for as and when mentoring of the learners with minimum response time. It also offers the capability to adapt to the individual's needs, personalized instructions, personalized doubts removal, and customized instruction based on analysis of learning capability of students and preserving it for continuous improvement using study behaviour and analytics.

BEST QUALITY AND ADAPTABILITY

Differing quality of teaching-learning in the conventional class room education is one of the big challenges. This variance in quality leads to varying interests of learners and a perennial desire of being taught by the best teachers in the respective field. Digital learning platforms once populated with the learning resources of requisite quality by the suitable course instructors can be invariably used by all for learning. Thus, the best quality education is available to all through the digital learning platform having the high quality learning resource with them. The quality of digital form of the learning resources has capability of being enriched and upgraded as per fast changing requirements of society/industry and making it available to learners as early as possible.

TEACHERS' UP GRADATION

Up gradation of teachers attaining higher age is a challenge in the current education system due to various reasons like social perception, no possible disruption in responsibilities shouldered by them, non-availability of time etc. Digital learning resources can be suitably used by the teachers for their up gradation and improvement without any hesitation and can continue to be a learner at every age, which eventually improves their teaching quality.

VIRTUAL EXPERIENCING

Digital learning platforms have potential to offer hands on training to the students through virtual laboratory and industrial working & practices. This hands on working experience leads to better visualization and enhanced creativity of students.

Self-learning: The availability of digital learning resource from different sources for the same subject provides students with opportunity to improve their understanding through different perspectives of educators and proceed with self-learning.

TRANSPARENCY AND FEEDBACK

Digital learning platform is capable of keeping complete trail of the learners learning and testing. The electronic form of this learning process management is quite transparent and the feedback mechanism is quite effective. In view of easy availability of electronic version of knowledge resources, the teaching processes have been challenged significantly

CONCLUSION

The students of present digital era have access to the virtual courses being offered by good quality teachers from different parts of the world and have access to the virtual laboratories, which is leading to the gradual loss of interest amongst students for attending structured classes. The informal delivery of courses in the form of nearly free e-content has limitations due to complete non-contact type learning environment which eventually leaves certain gaps in teaching of the courses. Shifting focus from faculty and their teaching to students and their learning is equally concerning as it leads to social disconnect. Learning hierarchies are not maintained as complete content is accessible and it leads to difficulties in application of knowledge at later stage. It is equally concerning to see that in the country like ours where good quality broadband internet access is in the state of getting expanded, the complete dependence upon digital education cannot be thought of. Sometimes, the technology becomes a cause of distraction to the learner and paves way for the cheating in assessment processes. It also leads to degradation of handwriting skills of the

learners, as they do not get ample writing opportunities. The content creation process involves technology support as well which means that more intellectual capital is required in the content creation and management as compared to the traditional education system which leads to shift in focus from quality to the presentation format and ease of access.

REFERENCES

- Kamal Deep Singh,S. (2012). Computer in Education New Delhi, Dhanpat Raj Publishing Company (Pvt) Ltd.
- .Arulsamy.S. and Sivakumar. (2009). Application of ICT in Education New Delhi, Neelkamal publication (Pvt) Ltd
- <https://www.thehighereducationreview.com/magazine/digital-learning-in-higher-education>.
- <https://en.unesco.org/themes/higher-education/digital>

ABSTRACT

Mobile Learning (m-learning) environments provides a wide range of new exciting learning opportunities supported by the wireless technology. This paper discuss the role of M-learning in the new educational setting which creates student-cantered learning and educational practices offering new more flexible learning method for higher education. In the digital 21st century learning and educational processes are integrated with new information and communication technologies (ICTs) in the education system. This new m-learning technology has fascinated the interest of researchers, educators and companies developing learning system and instructional materials. M-learning facilitates a new mechanism of teaching and learning process in order to enhance the learning and education experience of the students. The use of mobile devices and wireless technology in the new learning environments allows students to achieve more in their educational process. The m-learning environment will provide new study opportunities for the all individual difference. Strengthen the flexibility of being able to study at any time and any place.

Keywords: M-learning, wireless technology, e-learning

INTRODUCTION

Teaching learner aids alone cannot accomplish the task of education. If properly utilised Audio-visual aids reinforce learning. We all know that knowledge does not necessarily lead to intelligence, 'Being knowledgeable' is one thing and 'Being Intelligent' is quite another. Knowledge acquired and accumulated from sources, parents, teachers, friends and media- other than the self and these cannot directly help develop intelligence. It is a fact that reading makes a full man; conference a ready man and writing and exact man. Today's world is a fast-changing world with many inventions as well as discoveries. As well as in the field of education. E-learning system based on for mailed teaching but with the help of electronic resources . while teaching can be based in or out of the classrooms, the use of computers and the intent forms the major component of e-learning.

V.Muthu Selvi, Assistant librarian, St. Ignatius college of Education, Palyamkottai

Everywhere it is witnessed that the teachers have become the agents of change because the world has become too much filled with information explosion; and, this information explosion is moving so rapidly that even a well-literate person is feeling as if he or she is illiterate and unable to cope up with such an information explosion.

MOBILE LEARNING

Mobile Learning stands for m-learning which refers to learning with the aid of handheld technology like mobile phone, laptops and any other similar portable devices . which are handy .It is a form of distance education. M-learning use mobile device educational technology at their time convenience. Mobile technology can be used to deliver instruction and information to these remote regions without having people leave their geographic areas.

DEFINITIONS OF M-LEARNING

There is much debate as to whether m-learning is the next progressive step from e-learning or is simply an advanced tool that integrates with e-learning or is simply an advanced tool that integrates with e-learning. In either case, m-learning is a new and unique component of distance learning.

- Stevens and Kitchenham (2011) define mobile learning as “ the use of a wireless hand held hand help device; a cell phone personal digital assistant(PDA) mini-computer, orip
od to engage in some form of meaningful learning(p.3)
- According to clark Quin (2003) “Mobile Learning is E-learning through mobile computational devices”
- Pinkwert et al (2003) define m-learning as “...e learning that uses mobile devices and wireless transmission”
- Traxler (2005) defines m-learning is...any educational provision where the dominant technologies are hand held”

MODE OF MOBILE LEARNING

M-Learning is characterized by the ability to learn through portable devices. Technology has continued to play a pivotal role in teaching and training, through mobile technologies and devices have their own share of advantages and also disadvantages.

- This is a permanent problem that the mobile learning industry has to address and overcome

CONCLUSION:

Ubiquity of mobile devices in the classrooms has allowed for m-learning to take place within the classroom environment. These devices are now encouraging students to participate in face to face lessons with their mobile devices. M-learning needs to achieve acceptance and then status and then certifications eventually at university degree levels. University and colleges need to be convinced to accept fully. M-learning as their students on changes of time table submissions deadlines enrolment procedures and other administrative necessities. The course model for handhelds, palmtops, Smartphone and eventually for mobile phone should be developed. Furthermore, book on Mobile learning need to be written. On technological side, wireless internet is a must for M-Learning to take off. To cater for huge chunks of data that is common in most educational web-sites there is a need for high-speed wireless data transfer. But this should be at affordable costs to the general public.

REFERENCES

- Goli Srilatha, Venkat Ram Reddy.L(2013) *Mobile learning for easy learning*:Edutracks, vol.12, no.6
- Usha Rao, (2011). *Educational Technology*: Himalaya publishing House, New Delhi.
- Chandra Prabha.D, (2017) *Mobile over usage and academic performance of B.Ed.trainees*: St.Ignatius college of education.
- John traxlex, (2005). *Defining mobile learning*: Wolverhampton.
- Valarmathi K.E(2011). *Mobile assisted language learning*. Journal of Technology for ELT.1.2(April 20011)
- Sangeeta Pailwal. *Future trends of education-mobile learning problems and prospects*, IPAS Academy,Indore, India.
- Husain.M,(2012) *E-Learning*: Pearl Books, New Delhi.

ABSTRACT

Education is rightly regarded as a humanitarian science which most directly affects people's quality of life and well-being. The main function of modern education: to discover each child's individuality, to create conditions for the development of individuality, to ensure criticism in the education process, independence, initiative, creativity in thinking and in actions. A personality is judged by what are their most important needs are and what their needs structure and their correlation with values. This paper summarizes theoretical conclusions about what values are, how something becomes a value and what is determined as value, the hierarchies and variability of values in the aspects of space and the time. The authors analyse the choice of the values according to today's needs, the flexibility, focusing on which values will become dominant, which are those that affect human performance and personal development. This paper reveals the interest of members of the public in the implementation of the values education, the parental responsibility for upbringing. An important role in the upbringing process is determined by schools, as in these institutions a process of purposefully organized continuous cooperation between the teacher and student.

Keywords: Student, parent, teacher, values, values education, sustainable development

INTRODUCTION

Value-education is a many sided endeavour and in an activity during which young people are assisted by adults or older people in schools, family homes, clubs and religious and other organizations, to make explicit those underlying their own attitudes, to assess the effectiveness of these values for their own and others long term well-being and to reflect on and acquire other values which are more effective for long term well-being. Value-education is thus concerned to make morality a living concern for students. Hence, what is needed is value-education.

S.Sermathangam, Ph.D Research Scholar, Manonmaniam Sundaranar University, Tirunelveli

Dr.H.Deepa, Assistant Professor, B.Ed- DD& CE, Manonmaniam Sundaranar University, Tirunelveli

Despite many educators and educationists description regarding value-education, it cannot be denied that continuing research will continue to make the description of value- education more adequate. Schools should be induced to create a climate of values which should run various activities and would be conducive to the promotion of values among students, teachers, parents and educational administrators. Programmers' of value- education should incorporate values of integral personality in all its dimensions — physical, vital, intellectual, aesthetic, ethical and spiritual. Pupils produce personal attitudes, values, ideals, norms, objectives and principles. The goal for both the parents and teachers is to help students learn, understand and accept a certain value system, which significantly affects the development of their personality. Student, parent and teacher value dynamics reveal the urgent need for a modelling process that facilitates the formation and development of values in the context of sustainable development.

NEED OF VALUE EDUCATION

Now, looking at today's situation which is developing very fast, it is equally important for us to give a proper value-orientation to our educational system. The very purpose and main function of education is the development of an all round and well-balanced personality of the students, and also to develop all dimensions of the human intellect so that our children can help make our nation more democratic, cohesive, socially responsible, culturally rich and intellectually competitive nation. But, nowadays, more emphasis is unduly laid on knowledge-based and information-oriented education which takes care of only the intellectual development of the child. Consequently, the other aspect of their personality like physical, emotional, social and spiritual are not properly developed in providing for the growth of attitudes, habits, values, skills and interests among the pupils. It is here that we talk in terms of value-education. Values education can take place at home, as well as in schools, colleges, universities, offender institutions and voluntary youth organizations. There are two main approaches to values education. Some see it as inculcating or transmitting a set of values which often come from societal or religious rules or cultural ethics.

PRINCIPAL EDUCATIONAL VALUES

Values education covers various topics related to citizenship and ethics, including:

EMPATHY -By putting ourselves in other people's shoes both cognitively and emotionally, we improve our ability to resolve conflicts and understand others' opinions.

EQUAL OPPORTUNITIES-The principle that we are all equal is one of the pillars of democracy, and moreover it fosters social inclusion and community life.

RESPECT FOR THE ENVIRONMENT-Values education makes us aware of the consequences of our actions on the planet and instills in us a respect for nature.

CARE FOR HEALTH-We need to minimize health risks by encouraging the right attitudes and tackling health education from a dynamic, personal and collective point of view.

CRITICAL THINKING-This way of thinking makes us more analytical and observant, teaches us to recognize quality information and helps us to solve problems.

EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD)

Education for Sustainable Development(ESD) means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for Sustainable Development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way.

ESD PEDAGOGIES

Primary and secondary education is transformed by ESD pedagogies as much as it is by the sustainability content. Pedagogies associated with ESD stimulate students to ask questions, analyze, think critically and make good decisions. Such pedagogies move from teacher-centred to student-centred lessons and from rote memorization to participatory learning. ESD pedagogies are often place-based or issue-based. They encourage critical thinking, social critique, and analyses of local contexts. They involve discussion, analysis and application of values. ESD pedagogies often draw upon the arts, using drama, play, music, design, and drawing to stimulate creativity and imagine alternative futures. They

work towards positive change and help students to develop a sense of social justice and self-efficacy as community members.

PEDAGOGICAL APPROACHES IN ESD

There is no 'correct' pedagogy for sustainability education, but there is a broad consensus that it requires a shift towards active, participative, and experiential learning methods that engage the learner and make a real difference to their understanding, thinking and ability to act. We've identified five pedagogic elements that cover a host of pedagogical approaches or methods that staff at Plymouth might use to bring these elements into the learning environment.

- 1. Critical reflection** – including the more traditional lecture, but also newer approaches such as reflexive accounts, learning journals, and discussion groups.
- 2. Systemic thinking and analysis** – the use of real-world case studies and critical incidents, project-based learning, stimulus activities, and the use of the campus as a learning resource.
- 3. Participatory learning** – with emphasis on group or peer learning, developing dialogue, experiential learning, action research/learning to act, and developing case studies with local community groups and business
- 4. Thinking creatively for future scenarios** – by using role play, real-world inquiry, futures visioning, problem-based learning, and providing space for emergence.
- 5. Collaborative learning** – including contributions from guest speakers, work-based learning, interdisciplinary/ multidisciplinary working, and collaborative learning and co-inquiry.

STEPS TO EMBEDDING SUSTAINABILITY IN YOUR TEACHING

1. Understand the principles of sustainability

Sustainability, sustainable development and ESD are contested concepts and this can be frustrating for academics trying to incorporate them into their teaching. However, lecturers need to have some understanding of the main components of environmental, social and economic sustainability in order to embed them.

2. Identify the key sustainability issues in your discipline

Once you have a general understanding of sustainability, sustainable development and ESD, think about the key issues in your discipline and how they might be linked with sustainability. Virtually all disciplines and subject areas can make a contribution to ESD in some way and benefit from introducing an ESD dimension. For example, corporate responsibility in Business, the life cycle of materials in Engineering, industrial symbiosis in Manufacturing or global energy policy in International Relations.

3. Embed opportunities for students to develop sustainability skills

The ESD literature suggests that in order to negotiate complex and interdisciplinary sustainability issues, students need to develop sustainability skills. These include problem solving using holistic and systemic approaches, making critical judgments on real life issues, applying theory to practice and vice versa, and working collaboratively and in interdisciplinary . Students should be equipped to deal with the 'triple crunch' of climate change, the end of cheap energy and economic instability and have the skills to lead a low-carbon eco friendly economy which is resilient to climate change. Many sustainability skills can be promoted regardless of subject matter through pedagogy. Identify which skills can be developed or reinforced in your discipline, and create teaching activities that can enhance these using sustainability pedagogies.

4. Utilize sustainability pedagogies

There are a number of general principles regarding teaching and learning about sustainability all of which involve student-centered and interactive enquiry-based approaches. These include participatory and inclusive learning processes, trans disciplinary collaborations, experiential learning and the use of local environment and community as learning resources. suggest there are additional benefits as 'good sustainable development pedagogy is often simply good pedagogy', thus it fits well with a broader move towards more constructivist, learner centered approaches in HE. Potential sustainability pedagogies including: role play, simulations, stimulus activities, debates, reflexive accounts, personal development planning and problem-based learning. Consider material you already deliver and explore how making changes to its delivery might enhance sustainability skills in students.

5. Experiment with interdisciplinary

The multi-faceted nature of many sustainability issues invites interdisciplinary approaches to teaching and learning. This poses challenges for HE which primarily remains structured around disciplinary and compartmentalized structures. Talk to lecturers in other disciplines to share ideas about integrating sustainability into teaching and consider joint activities or extra-curricular events. Alternatively you could set up learning activities which encourage students to consider phenomena from different disciplinary perspectives.

6. Use the informal curriculum to enrich your teaching

Students may have valuable sustainability relevant experiences related to the campus or to extra-curricular activity such as volunteering or work-experience. Making explicit links between the formal and informal curriculum can broaden students' experience and perceptions of sustainability. Link informal learning to the formal curriculum through designing co-curricular activities which bridge the formal and informal spheres. Linking subject content with initiatives such as the Student Union, work based learning and independent study modules offer possibilities, as do knowledge transfer schemes.

7. Influence others - become part of the University's sustainability community

One of the main barriers to greater incorporation of sustainability into teaching and learning is lack of knowledge and confidence. You can use your own developing expertise in this area to engage and help others by becoming a Sustainability Education Developer (SED) in your disciplinary area and contribute for excellence in sustainability.

ROLE OF EDUCATION IN SUSTAINABLE DEVELOPMENT

Good quality education is an essential tool for achieving a more sustainable world. This was emphasized at the UN World Summit in Johannesburg in 2002 where the reorientation of current education systems was outlined as key to sustainable development. Education for sustainable development (ESD) promotes the development of the knowledge, skills, understanding, values and actions required creating a sustainable world, which ensures environmental protection and conservation, promotes social equity and encourages economic sustainability. The concept of ESD developed largely from environmental education, which has sought to develop the knowledge, skills, values, attitudes and behaviors in people to care for their environment. The aim of ESD is to enable people to make decisions and carry out actions to improve our quality of life without compromising the planet. It also aims to integrate the values inherent in sustainable development into all aspects and levels of learning.

There are a number of key themes in ESD and while the dominant focus is on environmental concerns, it also addresses themes such as poverty alleviation, citizenship, peace, ethics, responsibility in local and global contexts, democracy and governance, justice, human rights, gender equality, corporate responsibility, natural resource management and biological diversity. It is generally accepted that certain characteristics are important for the successful implementation of ESD, reflecting the equal importance of both the learning process and the outcomes of the education process. ESD should

- **Be embedded in the curriculum in an interdisciplinary and holistic manner**, allowing for a whole-institution approach to policy making.
- **Share the values and principles** that underpin sustainable development.
- **Promote critical thinking, problem solving and action**, all of which develop confidence in addressing the challenges to sustainable development.
- **Employ a variety of educational methods**, such as literature, art, drama and debate to illustrate the processes.
- **Allow learners to participate in decision-making** on the design and content of educational programmes.
- **Address** local as well as global issues, and avoid jargon-ridden language and terms.
- **Look to the future**, ensuring that the content has a long-term perspective and uses medium and long-term planning.

CONCLUSION

To conclude, I hope Value education should be the cornerstone of transformative education agenda addressing many complexities related to inclusion and equity including all forms of exclusion and marginalisation, disparities and inequalities in access, participation and learning outcomes. It is also important to impart value education as an integral part of sustainability education focusing on the most disadvantaged, especially those with disabilities, to ensure that no one is left behind. These efforts of values-based education help awaken our ability to visualise that a better world is possible, recover our enchantment even with the basic things of the everyday and in the creative capacity of the human being.

REFERENCES

- Cross, M (1995) Values education: a staff development manual for secondary schools. Framework Press, Lancaster.
- Halstead, J. M. (1996). Valuesfuck and valuessuck education in schools. London: The Falmer Press.
- <https://www.plymouth.ac.uk/students-and-family/sustainability/sustainability-education/esd>
- https://www.researchgate.net/publication/315351321_Values_Education_For_Sustainable_Development
- <https://journals.sagepub.com/doi/full/10.1177/0973408216661442>

ABSTRACT

This Paper presents the trends in Educational Technology that are dynamic and it can be varied from time to time. The field of educational technology consists of both theory and ethical practice in the educational process across different sectors. In this process, instructional design strategies provide contributions to global emerging technologies for learning and teaching in educational technology and learning environments. The recent trends in educational technologies are Virtual Reality, immersive Classroom, Block chain Technology, Personalized Learning, Artificial Intelligence, etc.,

Key Words: Educational Technology, Block Chain Technology, Instructional Design, Virtual Reality, Artificial Intelligence.

INTRODUCTION

The Simplest meaning of Technology is “Science of Study of an art or skill”. The Definition of Educational Technology is “The study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources.” Another definition is the one offered by Reisser (1987), who states that educational technology is the systematic way of designing, utilization, and evaluation of the teaching/learning process, in terms of specific objectives, based on research in human learning and communication fields and on combining human and technical resources. The field of educational technology found its origins in the discovery made by researchers and practitioners of the fact that the instruction can be planned, projected, evaluated and revised before being applied to students. (Mihalca,2007). The Webster’s Collegiate Dictionary (2001) defined a trend as a line of the general direction of movement and a prevailing tendency or inclination. Trend is also seen as a general movement in the course of time of statistically observed or detected change over a period of time (Ely, 2002). In the field of educational technology, trends help us to see the direction we are heading to as it shows new ideas, facts, approaches, devices introduced and their application to better the education industry. (Dennis, 2013)

This ranges from virtual education, student privacy, paperless textbooks, adaptive learning, augmented reality, and improved access to learning resources, more creative mindsets to virtual parent-teacher communications.

CURRENT TRENDS IN EDUCATIONAL TECHNOLOGY

Audio-visual tools were introduced for better communication and knowledge retention. Here are a few of the topmost innovative trends in educational technology that are going to make a huge impact in shaping the present student generation. In Educational Technology, there are various trends are obtainable.

1. VIRTUAL REALITY IN EDUCATION

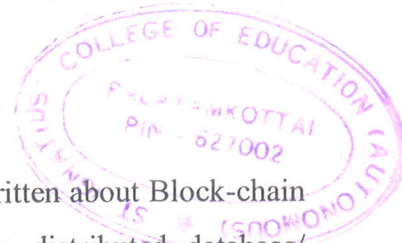
Virtual Reality (VR) present realistic scenarios for students. Their digital environments prompt higher comprehension and retention rates than traditional classroom settings. Plus, virtual worlds help students gain valuable hands-on experience that otherwise wouldn't be available. Moreover, this technology has enhanced creativity among students through imaginative play and thinking. The high adoption of VR in education is partly due to the rise in demand for experiential learning. By taking the learning process beyond the classrooms, VR has facilitated the growing trend towards independent learning route.

2. DIGITAL AND COMPREHENSIVE ONLINE ASSESSMENTS

Artificial Intelligence-driven assessments, personalized assessment of the students can be done using online examination systems. Such systems can provide useful insight into the student performance, group analysis and individual analysis for each topic / sub-topic. As assessment of the student is done using online tools and techniques, bias associated with manual evaluation can be eliminated. Assessment tools usually focused on evaluating the practicality of the subject rather than a theoretical knowledge of the student. An online examination system, students can write their answers using online editor provided, for each question or exam there is a timer. Students are not allowed to switch to other applications during active online exam. There is a facility of auto authentication of the student using a photo capture facility. An online examination system can also monitor students using video streaming. For objective exams, results are instantly provided. It eliminates the barrier of manual evaluation of student performance.

In the coming year assessment of the knowledge would be based on new factors

- Practical Implementation
- Ability of innovation
- Problem Solving using knowledge
- Conceptual Application of the knowledge



3. BLOCK CHAIN TECHNOLOGY

Block chain is an emerging technology. Many articles are written about Block-chain technology. It is useful when there is a need for collaboration, distributed database/information. Block-chain is useful for many areas of education including examination management, student credentials verification, certificates verification, etc.

Maintaining Student Academic Records. In the current scenario, the mark sheet of the individual students is maintained by respective universities. There is no way where any third-party authority, the employer can validate if marks or degree obtained by the student is valid and as per records of the university. The process of verification has to be done manually. Block chain technology can help to eliminate such issues where information collaboration, validation can help to validate the credentials of the student's degree or marks obtained. Storage of certificates of the students. Block chain technology can also help to store digital copies of the student certificates in a distributed and collaborated environment. Each university can act as a node or valuator where any authority can validate student documents by requesting for verified information of the students. Such a collaborative approach can help solve many issues like loss of original degree certificates or mark sheets, authentication of student education records, etc.

4. PERSONALIZED LEARNING

Traditional classroom based learning is becoming obsolete. Education delivery or learning process must be personalized. Traditional classroom based lecture process may not help each individuals. Every individual has some strength and weakness and pace of understanding particular topic is different for everyone. It also depends on individual students liking for particular subject or topic. Personalized learning using technology is one of the trend that would dominate in the coming year.

5. ARTIFICIAL INTELLIGENCE (AI)

The role of AI in the education sector is no longer limited to aspects like speech recognition, problem-solving, and planning. The use of artificial intelligence in today's classrooms has really transformed the quality of education. It can provide a great insight into student learning and improves the overall process with better communication. Teachers can make use of its possibilities to speed up the grading and other daily chores and utilize the saved time for quality teaching. It acts as a personalized learning companion to meet a variety of student needs and help teachers to act as learning motivators. The automation in classroom can help both students and teachers to stay more productive in the daily chores.

6. GAMIFICATION

The Adoption of gamification is perhaps one of the biggest trends in educational technology that turns the learning process lot more fun and engaging. We have seen gamification being used in classrooms in different forms such as leader boards, reward points, badges, stickers etc. Of all the trends in education technology, gamification is the one trend which guarantees an increase in participation, engagement, and competition. Creatively engaging students in learning is one of the smartest means of getting their attention for a longer time. This not only improves their interest for learning but also instills a friendly competitive mindset and invokes their creative thought process to win situations. Gaming through digital platform also improves their social behavior and problem solving skills.

7. DIGITAL COURSE MATERIALS

The newest report from the National Association of College Stores highlights the rising spend on technology by schools and colleges. This trend has directly affected the sales of textbooks and course materials, as students prefer spending on the digital course materials. With smart phones and high penetration of internet, assignments too have gone digital in nature. The very premise of educational technology is incomplete without digital content, thus advances in designing of the digital content are sure to have a positive impact on the future of education.

8. PAPERLESS TEXTBOOKS

The digital devices such as tablets are now slowly replacing the heavy textbooks. Cost was a highlighted issue; many schools have now recognized that this cost is much affordable over the time. School authorities can easily upload the study materials every term or year on the same devices and save the extra cost of new textbooks every year. The ease of accessibility and storage and comfort of carrying only a light weight tablet to school every day makes this a smart choice.

9. SOCIAL MEDIA INFLUENCE

Educational institutes have started using social media as a communication tool, where students can interact with their peers and faculty members. It is in fact playing a crucial role in shaping today's classrooms. This platform is helping teachers and students to globalize the classroom and connect easily with others with similar interests and mindsets. The right use of this social platform is giving opportunities for students to think about the lessons outside the classroom. Usually, students share videos and images with their friends and followers. But with social features embedded in their eBooks, they can share study

materials, opinions, projects etc. They can comment on someone else's post or share links to other websites, all the while building peer networks and enhancing the online learning experience. Teachers allow the use of social media as part of the learning model because it helps students to stay interested in their course and increases engagement. Social media is here to stay and incorporating it into learning modules will build a culture of collaboration and sharing, leading to an improved learning experience.

10. ONLINE COURSES AND LEARNING

The present education industry is more inclined to online courses and learning than just the classroom education. Students are largely utilizing the possibilities of online courses to study their preferred field of interest and research on their favorite subject areas. Students are also utilizing similar online courses to have an additional educational support on their tough subjects.

11. EMBEDDING INNOVATIVE ERESOURCES

Educators who are looking to incorporate digital content to the classrooms can now make use of the vast array of educational resources available online. However, selecting the right set of teaching materials from this wide array of information is the key. Today's technology is giving them options to access refined and well-researched digital materials that are relevant for their purpose.

12. FLIPPED LEARNING

The modern educational technologies are putting forward the possibilities of inverting traditional teaching methods to enhance learning process. In this teaching strategy, students are making use of the advanced educational technologies to have a look at lessons beforehand. They go through tutorials or videos to study the lessons at home and utilize the classroom time to do assignments. They can work out problems under the supervision of teachers and clarify their doubts if any. Moreover, having an idea about the subject beforehand makes it easy for students to easily catch up what teachers are talking about.

13. LEARNING OUTSIDE THE CLASSROOM ENVIRONMENT

Mobile-based devices have taken learning outside of the classroom. Students can learn at their own place and time. This trend is expected to keep up as it is a convenient method of delivering as well as receiving the education. Designing mobile-first responsive content helps students to go through their courses anytime and anywhere. Internet connection is no longer an issue with offline reading capabilities. eBooks can be embedded with many features to enhance the learning experience. Complete with annotation tools, bookmarks, hyperlinks, dictionary, search feature, an eBook makes learning more flexible.

14. LEARNING ANALYTICS

Learning Analytics are used to analyze student activities. It is defined as “The measurement, collection, analysis, and reporting of data about learners and their contexts, for the purposes of understanding and optimizing learning and the environments in which it occurs” (Siemens, 2013). Learning analytics could be used to improve student retention and support at-risk students by tailoring courses towards the pedagogic needs of students (Johnson et al., 2013). Learning analysis tools could also provide faster assessment and feedback for students, and be used for evaluating new pedagogical techniques, allowing lecturers, departments and institutions to focus resources more effectively.

CONCLUSION

This paper concludes that teaching and learning methods have undergone a significant change due to all the trends in education technology. Every year, new trends emerge to provide something new to the learners. They say change is constant, similarly, innovations in the field of technology are also constant. And certain innovations can be implemented in the education system for improving their learning and development process. The result of these innovations becomes a trend which then leads to better teaching and learning techniques.

REFERENCES

- Dennis, & Duru, D., Emerging trends in educational technology: the relevance in teaching and learning in Nigeria. *Knowledge Review*, 27(1), April, 2013
- Dharmadhikari, S.(2019). Top 7 trends of Educational Technology for 2019. Retrieved from <https://www.blog.epraves.com/top-7-trends-of-education-technology-for-2019/>
- Ely, S. & Knowles, D.M. (September 2002) Expression of CD56/NCAM Correlates with The Presence of Lytic Bone Lesions in Multiple Myeloma and Distinguishes Myeloma From MGUS and Lymphomas with Plasmacytoid Differentiation. *American Journal of Pathology*, (in press).
- Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., & Ludgate, H. (2013). NMC Horizon report: 2013. Higher Education Edition. Austin, Texas.
- Mihalca. L., & Mircea, M. (2007). Current trends in Educational Technology Research. *Cognition, Brain, Behavior*, 11 (1), 115 – 129.
- Reisser, R.A. (1987). Instructional technology: A history. In R.M. Gagné (Ed.), *Instructional technology: Foundations*. Hillsdale, NJ: Lawrence Erlbaum

- Siemens, G. (2013). Learning analytics: the emergence of a discipline. *American Behavioral Scientist*. 57(10), 1380–1400. doi:10.1177/0002764213498851
- Dharmadhikari, S.(2019). Top 7 trends of Educational Technology for 2019. Retrieved from <https://www.blog.epravesh.com/top-7-trends-of-education-technology-for-2019/>
- <https://blog.technavio.com/blog/top-10-trends-in-educational-technology>
- <https://www.edsys.in/trends-in-educational-technology/>
- <https://kitaboo.com/trends-in-education-technology/>

ABSTRACT

The historical evidence point to the fact that of much of human history, speech and body language were the only available forms of communication. .Mass Media are means or instruments of communication that reach large number of people or pupils with a common message. The matter may be printed like newspapers or it may take the form of radio, television and cinema. Print medium is the principal medium in the mass education scheme. The chief advantage is that the print medium is adaptable to many different learning environments. The educational television is a system that presents learning content in various subject are as through programmes prepared by a central agency. Media are in a literal sense extension of our senses. A communication specialist says that the invention of the printing press spelled the end of the close knit tribal communities.

Keywords: communication. Mass media, Print Media, Learning Environment

Introduction

The historical evidence point to the fact that of much of human history, speech and body language were the only available forms of communication. This changed when writing was developed, probably around the year 3000 B.C.in the area of world that we now call the Middle East. The most Obvious difference between write and speech is that media-speech is carried by sound waves in air and writing is usually carried by one substance impressed upon another, as, for example, blink on paper. Even in its simplest form, the invention of writing produced significant changes that came with the discovery of printed text in the late 1500 A.D. The revolutionary change was that while written documents could be produced by individuals, one document at a time, printed documents could be mass produced. The phenomenon we now call mass communication dates from the invention of print.

Meaning of Mass Media

Marshal McLuhan says that media are any extension of man which allow him to affect other people who are not in face to face contact with him. He argues that media influence society more in terms of how they communicate.

T.Sivamalar,M.Ed Scholar, St.Ignatius college of Education,Palyamkottai

He says that in terms of what they communicate. He says that electronic media are creating a global village, a community in which people throughout the world see major news unfold and hence participate in the same event. John Thompson maintains that media have played a central role in the development of modern institutions. He says that mass media have created a new form of social interaction – mediated quasi-interaction – which is more limited, narrow and one-way than everyday social interaction.

TWO CATEGORIES OF MASS MEDIA

- i. Print or newspapers, magazines and books.
- ii. Electronic or radio, TV, sound recordings, motion pictures and the Internet.

SIGNIFICANCE OF MASS MEDIA

- i. Mass Media are means or instruments of communication that reach large number of people or pupils with a common message. The matter may be printed like newspapers or it may take the form of radio, television and cinema.
- ii. Carlton W.H Erickson observes, “In recent years technology has swept through society from research laboratories into manufacturing communications, the space age, and finally now, into education”.
- iii. In early times, the teacher was the only medium of communication for children. He taught his students orally. During the course of time the invention of the printing press, led to the printing of books.
- iv. Schools and colleges for long have been the sole medium for imparting information and aiding in the acquisition of knowledge, new avenues of education have come up.
- v. The National Policy on Education 1986 and modified policy, 1992 has observed, “The media has profound influence on the minds of children. The mass media make the constraints of time and distance manageable”.
- vi. Modern educational technology must reach out to the most distant areas and the most deprived section of beneficiaries simultaneously with the areas of comparative affluence and ready availability.

vii. They are helpful in reaching large number of people. They are helpful in the spread of compulsory education and adult literacy.

MASS MEDIA AND EDUCATION: Education in its modern form, involving the instruction of pupils within specially designated school premises, emerged with the spread of printed materials and higher levels of literacy. The expansion of education in the twentieth century has been closely tied to the perceived needs for a literate and disciplined workforce. The rise of mass media and the rise of mass education are closely connected because of the latter's ability to read and write to participate in public sphere.

PRINT MEDIA: Print medium is the principal medium in the mass education scheme. The chief advantage is that the print medium is adaptable to many different learning environments. It is economical and it has been traditionally used for pedagogical purposes.

ELECTRONIC MEDIA: Electronic media through the variety and newness can motivate the learner, stimulate imagination, create and sustain interest.

Electronic media helps in involving the learner in the teaching/learning process and keep the concentration going.

EDUCATIONAL RADIO: The radio is the cheapest and the most easily accessible of all these means. No doubts, its potential audience is very large in comparison to the audience of the mass media. It caters to the people of different ages and levels of maturity ranging from a primary school child to its grandfather. While it provides learners with new choice of learning, it can develop their command over vocabulary, promote concentration and critical listening, and improve fluency and confidence in speech and discussion. It can be used for formal and non-formal education.

RADIO'S SCHOOL BROADCAST PROGRAMMES: These broadcasts may clarify a concept, or give additional views on a theme, or provide further illustrations and case studies related to an issue. Broadcasts under non-formal education may comprise programmes such as children's programme, women's programme. adult education programme rural development programme. These programmes help equalise or enlarge educational opportunities.

FREDRIC WITTIS has rightly remarked:” I like to think of education by radio as a timely, vital and dramatic thing; a system of learning or acquiring more information, a means of widening one’s horizon or enriching one’s life and breaking down prejudice through inspiration and not perspiration an education by desire and not by discipline; a pattern or swiftly changing pictures, events with keen interpretations, not statistics and formula’s; a moving panorama of the world in which we live right now, while we are living in it not a dearly drill of textbooks and tests

R.G. Reynolds writes: “Radio is the most significant medium for education in its broadcast sense that has been introduced since the turn of the century. As a supplement to classroom teaching its possibilities are almost unlimited. Its teaching possibilities are not confined to the five or six hours of the school day. It is available from early morning till long after midnight.

By utilizing the rich educational and cultural offerings of the radio, children and adults in communities, however remote, have access to the best of the world’s stores of knowledge and art. Some day its use an educational instrument will be as common place as text books and blackboards.”

HISTORY OF EDUCATIONAL RADIO

It was a great invention that human voice could be transmitted by electromagnetic waves overlong distance without the help of a wire. The radio which achieved it brought thereby a new age in the area of communication. In India July 23rd, 1927, a radio station at Bombay was formally matured by Lord Erwin It was followed by the Calcutta ado station on august 26th, 1927.And the Delhi radio station in January 1936.According to 984 report the All India Radio network one of the largest in the world, consisted of 86 radio stations with 162 transmitters. The radio network covered 89.69% of the total population over different parts of the country.

CHARACTEISTICS OF EDUCATIONAL RADIO

i. Easy accessibility- In comparison to other media radio is accessible to the majority of our countrymen. Low-cost transistors within the easy reach of even the economically weak people are available in the market.

ii. Wide Coverage- Today we cover a major portion of our territory by radio broadcasts as the broadcast facility is available throughout the subcontinent. The AIR has many of experience of combining the radio with correspondence and non formal education.

iii. Easy learner Reception- Radio broadcast can be listen to even while one is doing some manual work.

iv. Motivate Supportive Facilities- Broadcasting can make education interesting and enjoyable when it is used imaginatively.

v. Direct Instruction- The use of radio for direct instruction has been tried. Such schemes syllabus based programmes are broadcast for definite target groups.

EDUCATIONAL TELEVISION

The educational television is a system that presents learning content in various subject are as through programmes prepared by a central agency. It is an effective means for this purpose as it has the capability to overcome many of the barriers in mass education.

ROLE OF TEACHER IN EDUCATIONAL TELEVISION

i. Planning and Preparation Of Programme – The ultimate user of the ETV programme is the teacher, hence the teachers role in making decisions recording the content, matter and sequence is of utmost importance.

ii. Production of Programme – The production of ETV programme involves a lot of technical knowledge, but the knowledge of the mechanics of production helps him in contributing to the editing and modification stages.

iii. Presentation Of Programme – The TV presentation requires some extra skills other than class room teaching skills. So a teacher should be competent to present a lesson in the studio.

iv. Utilisation Of Programme – The teacher should be able to lead the follow up programme after viewing ends. The teacher has to get the peoples ready to watch a programme by providing necessary background information and later on conclude based n observations after viewing of the programme.

v. Evaluation Of the Programme – The teacher should be trained to evaluate all aspects of the programme. So that he will be in a position to suggest modifications both in the content and style of presentation.

EDUCATIONAL FILMS

Educational films are one such means of indirect experience. Motion pictures or films present an abstracted version of the real events omitting, unnecessary and an important details. Film communication acts as a link between classroom and the society. There are various kinds of motion pictures but we are concerned with educational films which are two kinds, Instructional films and Documentary films.

NEWSPAPER

The first newspaper was published in 17th century. The function of a newspaper is to make available to the public, the news, the whole news, as far as possible bias and without distortion. Newspaper today have the added responsibility of providing instruction.

Activities Using the Newspaper : The students group is assigned an international story in the news. The students are given the relevant map and asked such questions,

i. In what city did the story takes place?

ii. Which country is that city in?

Read And Write For Meaning: We can gather a few news headlines and ask students to write a small story on it. After completion the could match it with the original. The headlines and stories could be separated and mixed up.

Expand Your Vocabulary: Each student could be assigned a letter and by browsing through the newspaper he could be asked to list five new words beginning with that letter. We could also be asked to find dictionary meanings and put it upon the bulletin board.

Maths with Newspaper: The students are provided with advertisement tariffs and rates. They could be asked to calculate advertisement and renew from each paper, cost of fifty word advertisement, estimate the total number of classified adds. In this way newspapers can be integrated into classroom and lesser time activities as well.

EDUCATIONAL MAGAZINE

A magazine is something that lies between a news paper and a book. Unlike the book it is published periodically in a series. But it differs from a newspaper. The reporting off day-to-day happenings is not its main concern. The time lag gives ample time for putting together well thought of and synthesized reaction. Newspapers are read on the day and thrown away the next day. Magazines are read and reread and passed around to others or stored away for future reference. They travelled far and reach a wider audience. Example News magazines-India today ,Week etc Sports magazines-Sports star, Sports world etc

Purposes of Educational Magazines

Educational magazines provide a variety of reading materials which exposes children to literary genres including poetry, photo stories, short stories, fictions, nonfiction and current event articles. Educational magazines generally include writing activities that reinforce reading skills and improve grammar. Excises that develop spelling, vocabulary and word analysis skills. Puzzles and riddles that develop critical thinking and reasoning power. Educational magazine provides a means of proper utilization of lesser time for students and act as source of entertainment.

CONCLUSION

Media are in a literal sense extension of our senses. **Mashall Melhen** a communication specialist says that the invention of the printing press spelled the end of the close knit tribal communities. We have studied the various mass media related to education, the audio, the television, the newspapers and the books

REFERENCES

- Vanaja.M (2010),Educational Technology,Neelkamal Publications Pvt.Ltd,Hyderabad.
- Aggawal.J.C (2009),Essentials Of Edcational Technology,Vikas Publishing Houses Pvt Ltd,Noida .
- Sharma.R.A (2006),Educational Technology,Vinay Rakheja Lall Book Depot,Meerut.

- Rodriguez Sanchez, Doralis, 2017. Transforming ESL Teachers' Perspective on Media Literacy: An Action Research Project, *ProQuest LLC, Ed.D. Dissertation*, University of Puerto Rico, Rio Piedras (Puerto Rico).
- Rodriguez, Shelly; Allen, Kelli; Harron, Jason; Qadri, Syeda Ayesha, 2019. Making and the 5E Learning Cycle, *Science Teacher*, 86(5), 48-55.
- Rodriguez, Wanda. Analysis of Knowles' Andragogical Principles, Curricular Structure, and Adult English as a Second Language Standards: Curriculum Implications, *ProQuest LLC, Ed.D. Dissertation*, University of Puerto Rico, Rio Piedras (Puerto Rico).
- Roy, Catherine Karen, 2016. Be Creative and Collaborative: Strategies and Implications of Blogging in EFL Classes, *English Language Teaching*, 9(7), 129-145.
- Ryu, Jung; Boggs, George, 2016. Teachers' Perceptions about Teaching Multimodal Composition: The Case Study of Korean English Teachers at Secondary Schools, *English Language Teaching*, 9(6), 52-60.

ABSTRACT

Activity is the major tool to enhance learning levels. Incorporating anything that is hands-on is a great way to make learning fun. Any activity that gets students working together and up and moving around will be fun. Hands-on activities are a fun way for students to learn. Alphabet activities are not just for preschoolers. Use fun, hands-on alphabet, math, English, and geography activities to help students learn in a memorable way. Students learn through their participation in the attainment of knowledge by gathering information and processing it by solving problems and articulating what they have discovered. Muscle-strengthening activity increase bone strength and muscular fitness. Such activities should work all the major muscle groups of your body, that is, the legs, hips, back, chest, abdomen, shoulders and arms. Problem-based learning activities are similar to case studies but usually focus on quantitative problems. In some cases the problems are designed to introduce the material as well as provide students with a deeper learning opportunity. Nowadays various emotional problems are spoiling the life of all human beings. Especially the future pillars of nation should be brought up with resilience, for this common problems of family and society can be discussed in the classroom. Research says that when students work together, they retain information quicker and longer, they develop critical thinking skills, and they build their communication skills. Those are just a few of the benefits cooperative learning has on students.

Keywords: Quantitative problems, Problem-based learning, Communication skills, Cooperative learning.

INTRODUCTION

Activity is the major tool to enhance learning levels. Cognitive, affective and psychomotor domains are developed through activities. Innovation is a new idea, or more-effective device or process. Innovation is generally considered to be the result of a process that brings together various novel ideas in a way that they have an impact on society.

Dr.S.Guru Vasuki, Asst. Prof. in Education, V.O.Chidambaram College of Education, Thoothukudi

Classroom activities are developing students' attention, concentration and involvement in learning. This study deals with activities in classroom. Here the students are actively involve in learning.

KINDS OF ACTIVITIES

There are many kinds of educational, academic, vocational, curricular and co-curricular activities. Various classroom activities are game, simulation, debate, group discussion, drawing, painting, writing, puzzle, picture-arrangement, story telling, album preparation, word arrangement, word formation, discussing real life problems, motivational activities and correlating these with the above activities are enhancing teaching-learning process. Students learn through their participation in the attainment of knowledge by gathering information and processing it by solving problems and articulating what they have discovered.

PHYSICAL ACTIVITIES

Muscle-strengthening activity increase bone strength and muscular fitness. Such activities should work all the major muscle groups of your body, that is, the legs, hips, back, chest, abdomen, shoulders and arms. Examples include doing exercises that use your body weight for resistance (e.g. push ups, pull ups, sit ups and squats), working with resistance band and weight training. Being physically active is one of the best ways to keep our heart and lungs healthy.

SENSATIONAL ACTIVITIES

Writing activities are usually 1-2 minutes, and can focus on key questions and ideas or ask students to make predictions. These activities give students the opportunity to organize their own thoughts, or can be collected by the teacher to gain feedback from the students. Advantages include developing students' abilities to think holistically and critically, and improving their writing skills. Case studies are scenarios that apply concepts learned in class to a "real-life" situation. They are usually presented in narrative form and often involve problem-solving, links to course readings or source materials, and discussions by groups of students, or the entire class. Usually, case studies are most effective if they are presented sequentially, so that students receive additional information as the case unfolds, and can continue to analyze or critique the situation/problem.

PROBLEM-BASED LEARNING

Problem-based learning activities are similar to case studies but usually focus on quantitative problems. In some cases the problems are designed to introduce the material as well as provide students with a deeper learning opportunity. The advantages of problem-based learning activities and case studies include developing students problem solving and

decision making skills, develop student's critical thinking skills encouraging critical reflection and enabling the appreciation of ambiguity in situations. Multitasking in the classroom is not a negative when it comes to hands-on activities such as coloring, scribbling, or cutting with scissors. Indeed, even adults benefit from the "busy hands, busy brain" phenomenon: Recent research has shown that people who doodle during business meetings have better memory recall. Hands-on projects obviously engage kids who are tactile or kinesthetic learners, who need movement to learn best. They also engage students who are auditory learners, who talk about what they're doing, and visual learners, who have the opportunity to see what everyone else is creating. For social learners, the time spent in small group conversation will strengthen their knowledge. The importance of class activities lies in their effectiveness in achieving learning outcomes, creating a more collaborative environment, and enhancing students' learning in a more practical manner. To achieve these, students will benefit most if the online content which they go through in advance is clearly mapped with the activities in face-to-face sessions. Encouraging learners to reflect on their learning is an activity which promotes effective learning. This can be done in a period of time by assigning the students to create a journal or portfolio. Ask the students to prepare a visual depiction of a story related to the concepts covered online. They should work in groups to create the setting, characters and ending that best relates to real life situations. Role-plays provide an opportunity to the students to simulate real life in their learning. You can task the students to act out their role-plays or interviews after practicing them with their peers. We can record it and display it among the participants for the improvement of their play skills and also learn the concept. Games are rejuvenating and fun for the learners, while they can have a significant impact on their learning.

LEARNING RESILIENCE SKILLS

Resilience means the quality of being elastic. Nowadays various emotional problems are spoiling the life of all human beings. Especially the future pillars of nation should be brought up with resilience, for this common problems of family and society can be discussed in the classroom. For example individuals' role in home and society should be recognized by them and also they should get awareness to face challenges in family and society. Critically sensing the deviant behaviour, cause and effect analysis, marginal analysis, functional analysis and regression efficiency will help to improve resilience skills. These can be practiced in the classroom.

HUMAN DEVELOPMENT CLIMATE SKILLS

Human resource development is the process of helping people to acquire expertise. In an organizational context, it is the process by which organizations help their employees in a continuous and planned way in order to: a. acquire or sharpen the abilities required to perform various functions, be associated with their present or expected future roles, c. develop their general skills as individuals, discover and utilize their inner potential for their own and/or organizational development purposes offered divergent views and d. develop an organizational culture in which supervisor-subordinate relationships, teamwork and collaboration among sub-units are strong and contribute to the professional well-being, motivation, and pride of employees. Activities in each milestone include games, rhymes, drawing, and songs to teach a letter or a word, form a sentence, do maths and science, or understand a concept. The child takes up an Exam Card only after completing all the milestones in a subject. Rao (1988) suggests that human resource development sub-systems comprise performance appraisal, potential appraisal, career planning, training, performance coaching, organization development, employee welfare, rewards, quality of work life and human resource information system. Pareek (1983) refers to performance appraisal, feedback, counselling, potential appraisal, career advancement, career planning and training as dimensions of human resource development. Focus on professional and vocational learning, including related awareness raising, skills development, and enhancement of on-the job performance. The Strategy seeks to integrate climate change education into key sectors while strengthening national climate change education and training capacities. Sectors specifically targeted by this strategy include: agriculture, energy, forestry, tourism, and the water sector. Additionally, the strategy calls for educating teachers regarding climate change and developing and distributing teaching materials on climate change (Rao.T.V., 1990).

CONCLUSION

Research shows activities allows the students to learn from each other's successes and weaknesses. To make it work well, it is important that we provide clear idea and guidelines. If the child is provided the opportunity to explore by their own and provided an optimum learning environment then the learning becomes joyful and long-lasting. characteristics of activity based learning could be identified as follows (Bonwel and Eison, 1991): Students are involved in learning activities more than listening, and less emphasis is placed on

transmitting information and more on developing student's skills. Students are involved in higher-order thinking such as analysis, synthesis, and evaluation. Greater emphasis is placed on student's exploration on their own attitudes and values.

REFERENCES

- Ambrose, S.A., Bridges, M.W., DiPietro, M., Lovett, M.C., & Norman, M.K. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco: Jossey-Bass.
- Ausubel, D. (1978). In defense of advance organizers: A reply to the critics. *Review of Educational Research*, 48, 251-257.
- Jenkins, A. Blackman, T., Lindsay, R & Paton-Salzberg R. (1998) Teaching and Research: students' perspectives and policy implications, *Studies in Higher Education*, 23, 2, 127-141
- Entwistle, N., Thompson, S., & Tait, H., (1992) Guidelines for Promoting Effective Learning in Higher Education, Centre for Research on Learning and Instruction, University of Edinburgh.
- Hudson, T. (1982). The affects of induced schemata on the 'short-circuit' in L2 reading performance: Non-decoding factors in L2 reading performance. *Language Learning*, 32, pp. 1-31.
- Rao (1988). First published: March 1988. <https://doi.org/10.1111/j.1467-8411.1988.tb00144.x>. Cited by: 9. About. Related; Information.
- Pareek, U. (1983) Organizational Role Stress Scale. Manual, Navina Pub., Ahmedabad.
- Life after 360 Degree Feedback and Assessment and Development Centres; Editors T. V. Rao, Nandini Chawla and S. Ramnarayan); New Delhi: Excel Books, 2010.
- Bonwell, C & Eison, J. (1991). Active learning: creating excitement in the classroom *ASHE – ERIC Higher Education Report*. Retrieved from www.oid.ucla.edu/./active.learning-eric on 27th Sep.

ABSTRACT

Social media is an important tool among the present day population. It can be capitalized for education. The use of social media cannot be taken as the line of least resistance to which a teacher can succumb. It can be used in all subjects with remarkable effect. The authors convey the importance of researches on social media support for teaching through this paper. Moreover, they strongly confess the vital role of researches on social media support in the teaching learning process for the wholesome development of the students by making the teaching-learning process more meaningful.

Keywords: Social media, Quality Teaching, Teaching-Learning Process.

INTRODUCTION

In the present digital world, communication technology quickly changes by all means. The students are equipped with digital gadgets because Internet is being used enormously at a very lowest cost and they use it for sending SMS, reading news and reviews, browsing for material collection, connecting with friends, keeping themselves updated etc. Now-a-day technology is considered as an effective tool for language the subject matter. The teaching-learning using the technology in the classroom and the interactive features of social media had empowered the teachers to discover novel ways to engage their students more and more creatively not only in the classroom but also in outside.

Social media is the latest tool because most of the people accept the meritorious aspects of implementing the concept in classroom learning (Mercy & Arockiasamy, 2017). There are many useful social media applications that help the teachers and the students. ICT has an enormous impact on improving the learning skills. The recent trend in ICT is using social networking through WhatsApp, Facebook, Twitter etc. WhatsApp is best viewed as a facilitator of communication and a means of dispersing educational resources and information to students (Riyanto, 2013).

A.Nancy, Ph.D Scholar, Mother Theresa Womens' Univeristy, Kodaikannal
Dr.S.P.Denisia, Associate Professor of English, Mother Theresa Womens' Univeristy, Kodaikannal(Rtd)

Social Media

Information and Communication Technology (ICT) plays a vital role in promoting the teaching and learning activities in a novel manner. Likewise the social media also plays a significant role in the teaching-learning process. Social media applications like google, twitter, Facebook, WhatsApp, YouTube, Reddify, online advertisements, journals, magazines, Viber, Wikipedia, Instagram and LinkedIn have been used extensively by various categories of people for gathering information, posting their views, sharing information, gaining people's likes and comments etc. It makes teaching-learning process more effective. It may be defined as digital tools and resources. In social media, people had lot of improvements along with our new technologies and instruments for better understanding. Children have to be significant in the education system.

The social media sites, mostly public web-based services allow users to develop a personal profile, read and react on the postings on the site (Boyd. D.M. and Ellison. N.B. 2007). Social media has become a part of everyday life. There are many advantages to its use and people utilize the functions each and every day. Society has become so fixated on social media that they do not fully understand what they are opening themselves up to. Parents, educators, and everyday social media users must understand and be aware of the positive and negative connotations of social media usage in order to promote the healthy development of the youth in society.

SOCIAL MEDIA FOR TEACHING AND LEARNING

Social media such as, Internet, Online magazines, Online journals, Online advertisement, WhatsApp, Twitter, Reddify, Google+, Viber, Wikipedia, YouTube, Instagram, Facebook, LinkedIn etc are extensively used for teaching and learning by creating blogs or pages especially for live streaming of classroom interactions between the teachers and their students. Internet is nothing but network of networks connected through wide range of cables, modems, routers etc. Internet plays a vital role in teaching and learning process. It helps the learners and their teachers to learn more and more from the global resources. Other than this, people extensively use the internet for various purposes like communication, entertainment, etc.

Social network sites are a form of social media defined by the following socio-technical features: 1) uniquely identifiable profiles that consist of user-supplied content and/or system provided data; 2) public display of connections that can be traversed by

others; and 3) features that allow users to consume, produce, and/or interact with user-generated content provided by their connections on the site (Ellison and Boyd 2013, p. 7).

Social media applications like WhatsApp, Facebook, Twitter etc., offer various opportunities to the users to connect friends and relatives worldwide for sharing their views and opinion in the form of text, animations, pictures, videos. The recent advancements in the computer and communication industry occupies a major role in almost all the phases of human life. Free and instant messaging services to all the smart phone users from the social media networks. While using the Internet services, the messaging services and interacting with one another through this messaging system make the entire system more effectively.

SOCIAL MEDIA AND THE STUDENTS

Social media not only helps the students to acquire knowledge but also establishing a strongly relationship with others, connecting with them through Facebook, Whatsapp, Twitter, Instagram etc. Various social media sites can help the students to overcome a kind of isolation, otherwise it might lead to leave the school. A social media account can provide even a shy student with information about certain particular things that facilitates face-to-face encounters with other students. Such personal interactions are important to create and sustain a sense of belongingness.

Social media sites encourage the students to engage with each other's and to express and share their views and comments creatively. These sites focus heavily on building online communities with common interest or activities. As there are positive effects of social media, there are some negative effects also.

ADVANTAGES OF SOCIAL MEDIA IN TEACHING - LEARNING PROCESS

Social media sites provide students and the teacher communities with the opportunity to stay connected with others. It helps to make new friends, share pictures and exchange their ideas, views and comments. Students can also engage in their communities by raising money for charities, develop their creativity through sharing their art or music, and get to know others from diverse backgrounds through shared interests. Social media also offers enhanced learning opportunities. Some schools use blogs as teaching tools with the benefit of improving skills and creativity. Facebook and other similar sites allow students to gather outside of school and exchange ideas about assignments or collaborate on group projects. The following are the some of the advantages of social media especially in the teaching-learning process.

1. Social media is an effective and interesting tool of teaching. Even dull and difficult subjects may be taught and learnt easily with the help of social media.
2. Social media gives vividness to the learning situation.
3. The harmony of teaching job used with social media, freedom and restraint paves the way for the best of teaching-learning process. The students are not compelled to learn but learn voluntarily the subject content with a deeper insight.
4. Social media provides better clarity to the teaching and teaching situation.
5. Social media keeps the students fully absorbed in the learning process. The curriculum becomes interesting.
6. It meets the individual differences among the students and a good substitute for direct experiences.
7. It helps to create interest and involvement among the teacher and the students.

DISADVANTAGES OF SOCIAL MEDIA IN TEACHING - LEARNING PROCESS

1. Social media cannot be projected all the times.
2. Too much of using mobile phones and other gadgets is quite difficult and harmful for the brain system and optical nerves, which make the students tiresome.
3. This kind of teaching and learning is becoming costlier when compared with the traditional method of teaching and learning.

CONCLUSION

Social media is the best way of learning, whereas the students learn through concentration of mind on essentials, choosing merely those which are useful, rejecting the rest as undesirable because they want the short-cuts to learn successfully, the students learn naturally with all the senses active and eager, receiving the perpetual stream of ideas which comes from the heart of the teacher, pooling the facts and knowledge by such scattering of mental as well as physical energy through unexpected surprises with their ever alert attention. Still now, there are hesitations among the educational thinkers to revise the curriculum based on latest innovations like social media. These hesitations should be waived up and studies should be done on the implementation of such methods of teaching and learning to develop the present day curriculum. Hence, the authors opine that the teaching through social media will be inevitable in the near future for the better tomorrow.

REFERENCES

- Rather, A.R. 2014. Essentials of Instructional Technology: Discovery Publishing House.
- Mercy and Arockiasamy. 2017. Innovations in Educational Technology: Mary Publishers, Trichy.
- Boyd, D.M., & Ellison, N.B. 2007. Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), article 11. Retrieved October 9, 2008, from <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html>
- Maya Shankar Singh. 2007. Challenges of Teacher Education. Adhyayan Publishers and Distributors, New Delhi. ISBN: 81-8435-048.
- Ellison, N.B. & Boyd, D. 2013. Sociality through SNS. In Dutton, W.H. (Ed.), *The Oxford Handbook of Internet Studies*. Oxford: Oxford University Press, pp. 151-172.

QUALITY EDUCATION FOR WOMEN

Vennila Santha Ruby .C

M.Viji

“Education without values, as useful as it is, seems rather to make man a more clever devil.”

— C.S. Lewis

ABSTRACT

Promote equality in education through the revision of school curricula and policies to counteract gender discrimination, and equal access to vocational education and training as well as information technologies. Together with partners, we have worked on school curriculums and on virtual schools. More girls than ever before are going to school. Not only do they learn to read and write, but each year that they remain in school after the primary level, reduces their chance of marrying at too young an age. It increases their prospects for employment, health and overall well-being. Girls and women have an equal right to a quality education and learning throughout all phases of their lives. Gender gaps in primary and secondary enrolment rates have nearly closed, on average. Yet 15 million girls are not in primary school right now, compared to 10 million boys. In adolescence, higher numbers of girls often drop out of secondary school for reasons including early pregnancy and the expectation that they should contribute to household work.

Keywords: Employment, Well-Being, Gender Gaps, Early Pregnancy, Aicte

VennilaSantha Ruby C Assistant Professor of English St. Ignatius college of
Education, Palayamkottai

Viji M Assistant Professor of Mathematics St. Ignatius college of Education Palayamkottai

INTRODUCTION

Education is one of the most important means of empowering women with the knowledge, skills & self – confidence necessary to participate fully in the development process. Formally very few women used to obtain higher education as compared to men. However, since independence efforts are being made in India to eradicate illiteracy & also to raise the status of women as a whole. Now, society has realized the importance of educating women education as one of the most effective forces to raise their status. Women themselves have become aware of the power & benefits of education particularly of higher education.

WOMEN EDUCATION FROM THE PAST

During the period of the Vedas and the Upanishads, women's progress kept pace with that of men. In that action- oriented society, no religious rites could be performed by a man without the participation of his life. The woman was not expected to use a veil & enjoyed rights and responsibilities in the family.

Although in the Vedic period women had access to education in India, they had gradually lost this right. However, in the British period there was revival of interest in women's education in India. During this period, various socio-religious movement led by eminent persons like Raja Ram Mohan Roy, Ishwar Chandra Vidyasagar emphasized on women's education in India. Jyotiba Phule, Ambedkar, Periyar were leaders who took various initiatives to make education available to the women of India. However women's education got a fillip after the country got independence in 1947 & the government has taken various measures to provide education to all Indian women.

BENEFITS OF WOMEN EDUCATION

- Increased economic productivity & reduced poverty.
- Lowered material & infant mortality rates.
- Delayed sexual activity & improved reproductive health
- Increased gender equity.
- Strengthened democracy.
- Enhanced social states.
- Improved management of water & other environmental resources.

- In addition, girls who receive an education tend to marry at a later age & raise fewer children who are healthier.

BARRIERS TO WOMEN EDUCATION

It is rightly stated that “Educating a boy is educating a person while educating a girl is educating a nation”. Some of the major barriers which stand for girls education are as follow:-

- Lack of consciousness amongst the female members to be educated.
- Lack of safe transportation for girls to go to school.
- Students are often required to buy uniforms, transportation & supplies like textbooks, pens & notebooks, not to mention the indirect costs such as loss of potential income from missed labour opportunities or contribution around the home.
- Lack of women teachers in primary & middle schools has been a major factor for low enrolment of girls.
- Unwillingness of many parents to send their daughters to mixed schools.
- Early marriage age in many states acts as an obstacle.
- In conflict-affected regions like Jammu & Kashmir, education is not always accessible. As a result, girls in these regions are almost 2.5 times more likely to be out of schools than girls living in other areas.
- Overcrowded classrooms & rundown schools provide students with a less-than-quality learning environment schools that do not provide students with access to separate toilets, washing areas & sanitary products can discourage girls from attending schools.

MEASURES TO IMPROVE WOMEN EDUCATION

The expansion of education among women has been an integral part of educational policies & programmes. The National Policy on Education 1986 lays emphasis on women education through empowerment programme. Accordingly, Ministry of Human Resource Development has taken a number of initiatives.

“BETI BACHAO, BETI PADHAO”:

Under this, Rs.5 Crore has been made available for strengthening girl’s education in 100 specified districts on the basis of child sex ratio.

NATIONAL SCHEME OF INCENTIVE TO GIRLS FOR SECONDARY EDUCATION (NSIGSE)

This provides Rs. 3000 which is deposited in the name of eligible unmarried girls under 16 years of age. The objective of this scheme is to reduce drop out and to promote the enrolment of girls in secondary education.

“SARVA SHIKSHA ABHIYAN” (SSA)

This scheme is to ensure greater participation of girls in elementary education. This includes opening of schools in the neighbourhood to make access easier for girls, appointment of additional teachers including women teachers, free textbooks, free uniforms, separate toilets for girls.

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION (AICTE)

It has launched a scheme to provide assistance for advancement of Girls participation in Technical education.

CONCLUSION

Only a handful of people have actually realized the importance of educating a girl. Educated girls can brighten the future of their country by the good upbringing of their children. Education gives a woman freedom of thought. It broadens her outlook and makes her aware of her duties and responsibilities. The progress of a country depends on women education. So, women's education should be encouraged.

“ Educate every girl;

They will emerge out to be a Pearl”.

REFERENCES

- Rao R.K, Women and Education ,(2019). New Delhi, Kalpaz publication.
- Awoak,,Status of Woman in Education,(1988),Ambala Cantt,D.K.Vaid for the Indian publication.
- Mane.M.S,Education for Women Development,(2015),Kanpur,Chandralok Prakashan.
- <https://www.one.org/international/>
- <https://www.thehindu.com/opinion/open-page/recrafting-indian-education/article26481759.ece>
- <https://www.fresherslive.com/current-affairs/static-gk-today-general-knowledge>

INTEGRATION OF 21ST CENTURY SKILLS IN TEACHING AND LEARNING PROCESS

M. Jesudass

ABSTRACT

Making the students for hard work, good citizenship, and life in the 21st century is complicated. Globalization, technology, migration, international competition, changing markets, and transnational environmental and political challenges add a new urgency to develop the skills and knowledge students need for success in the 21st century context. Educators, education ministries and governments, foundations, employers, and researchers refer to these abilities with terms that include “21st century skills,” “higher-order thinking skills,” “deeper learning outcomes,” and “complex thinking and communication skills.” Interest in these skills is not new. Apart from this, the multi or various new skills of 21st century should be integrate in logical manner. This paper, we discussed about how can we identify and integrate the 21st century skills in teaching and learning process.

Keywords: Globalization ,Transnational Environmental ,Communication Skills, Education Ministries

INTRODUCTION

The nature of the global society has changed with the information explosion. The world has entered the information age. Rapid changes in science and technology are taking place in the world. Therefore, what would be the nature of the world of work in future has become unpredictable. The students, those who are going to enter the school now, will remain a part of the learning system for at least for the next 12 years. This long days and years determine their bright future. Students of today when they grow up will have to continually update themselves with the new technologies and the changing nature of occupations. It is in such a context the emphasis of learning at the school level will require a shift from teacher centred to being learner-centred. Therefore it is the responsibility of educators especially teachers to provide all the integrated skills for the 21st century through education they need to develop their potential.

M. JESUDASS, Ph.d., Research Scholar, Department of Educational Technology,
Bharathidasan University, Khajamalai Campus, Tiruchirappalli – 620 023.

THE PILLARS OF EDUCATION

Education is the basement of knowledge and skill development. Education having four pillars. learning to know, learning to do, learning to be and learning to live together.

LEARNING TO KNOW

The first of these is learning to know. Bearing in mind the rapid changes brought about the scientific progress and new forms of economic and social activity, there is a need to combine a broad general education with the possibility of working in depth on a selected number of subjects. In a sense, such a general education is the passport to learning throughout life, insofar as it should teach people to enjoy learning and also lay the foundations that will enable them to carry on learning throughout their lives.

LEARNING TO DO

Learning to do is the second pillar. In addition to learning to practise a profession or trade, people need to develop the ability to face a variety of situations and to work in teams, a feature of educational methods that does not receive enough attention at present. These skills are more readily acquired if pupils and students have the opportunity to develop their abilities by becoming involved in work experience schemes or social work while they are still in education. Increased importance should thus be attached to all schemes in which education alternates with work.

LEARNING TO BE

Learning to be was the theme of the Edgar Faure Report published under UNESCO's auspices in 1972. The Report's recommendations are still extremely relevant, for in the twenty first century everyone will need to exercise greater independence and judgement combined with a stronger sense of personal responsibility for the attainment of common goals.

LEARNING TO LIVE TOGETHER

Learning to live together, finally, by developing an understanding of others, of their history, their traditions and their spirituality. This would provide a basis for the creation of a new spirit which, guided by recognition of our growing interdependence and a common analysis of the risks and challenges of the future, would induce people to implement common projects or to manage the inevitable conflicts in an intelligent and peaceful way. Some might say that this is utopian; and yet it is a necessary utopia, indeed a vital one if we are to escape from the dangerous cycle sustained by cynicism and complacency

SKILLS OF 21ST CENTURY

21st Century skills are 12 abilities that today's students need to succeed in their careers during the Information Age. Some of the skills are listed below for example of 21st century skills.

1. Critical thinking
2. Creativity
3. Collaboration
4. Communication
5. Information and communication technology
6. Media literacy
7. Technology literacy
8. Flexibility
9. Leadership
10. Initiative
11. Productivity
12. Social skills

USUALLY SOME NOTED DEFECTS IN OUR EDUCATION SYSTEM

- It is not primer specific
- Lack of proper planning
- Training needs are not properly identified
- Appropriate training methods are not used (focus is on lecture method)
- Lack of relevant training materials on specific aspects of talc
- Proper monitoring evaluation and documentation are not seen
- Number of participants are bigger in size (unmanageable number)
- Insufficient support system for training
- Same training model is followed in low and high literacy areas
- Research training is very poor
- Development of various integrated skills is not properly attended

HOW CAN WE MAKE THE STUDENTS AS SKILLED ONE THROUGH EDUCATION?

Education, Teacher, curriculum of teacher education programme, Teaching learning process , teaching and learning activities of class the class room, these are the tools for determine the development of 21st century's skills among the students. Hence we have to improve the teaching process. so the following ten requirements will be helpful to improve our teaching process.

TEN REQUIREMENTS FOR BETTER TEACHING

1. Good teaching is as much about passion as it is about reason. Its about not only motivation students to learn, but teaching them how to learn, but teaching them how to learn, and doing so in a manner that is relevant, meaningful, and memorable. Its about caring for your craft, having a passion for it, and conveying that passion to everyone, most importantly to your students.
2. Good teaching is about substance and treating students as consumers of knowledge. Its about doing your best to keep on top of your field, reading sources, inside and outside of your areas of expertise, and being at the leading edge as often as possible. But knowledge is not confined to scholarly journals. Good teaching is also about bridging the gap between theory and practice. Its about leaving the ivory tower and immersing oneself in the field, talking to consulting with, and assisting practitioners, and liaison with their communities.
3. Good teaching is about listening, questioning, being responsive, and remembering that each student and class is different. It's about eliciting responses and developing the oral communication skills of the quiet students. It's about pushing students to excel; at the same time, it's about being human, respecting others, and being professional at all times.
4. Good teaching is about not always having a fixed agenda and being rigid, but being flexible, fled experimenting, and having the confidence to react and adjust to changing circumstances. It's about getting only 10 per cent of what you wanted to do in a class done and still feeling good. It's about deviating from the course syllabus or lecture schedule easily when there is more and better learning elsewhere. Good teaching is about the

creative balance between being an authoritarian dictator on the one hand and pushover on the other.

5. Good teaching is also about style. Should good teaching be entertaining? You bet! Does this mean that it lacks in substance? Not a chance! Effective teaching is not about being locked with both hands glued to a podium or having your eyes fixated on a slide projector while you drone on. Good teachers work the room and every student in it. They realize that they are the conductors and the class is the orchestra. All students play different instruments and at varying proficiencies.

6. This is very important – good teaching is about humour. It's about being self-deprecating and not taking you too seriously. It's often about making innocuous jokes, mostly at your own expense, so that the ice breaks and students learn in a more relaxed atmosphere where you, like them, are human with your own share of faults and shortcomings.

7. Good teaching is about caring, nurturing, and developing minds and talents. It's about devoting time, often invisible, to every student. It's also about the thankless hours of grading, designing or redesigning courses, and preparing materials to still further enhance instruction.

8. Good teaching is supported by strong and visionary leadership, and very tangible institutional support resources, personnel, and funds. Good teaching is continually reinforced by an overarching vision that transcends the entire organization from full professors to part-time instructors and is reflected in what is said, but more importantly by what is done.

9. Good teaching is about mentoring between senior and junior faculty, teamwork, and being recognized and promoted by one's peers. Effective teaching should also be rewarded, and poor teaching needs to be remediating through training and development programs.

10. At the end of the day, good teaching is about having fun, experiencing pleasure and intrinsic rewards... like locking eyes with a student in the back row and seeing the synapses and neurons connecting, thoughts being formed, the person becoming better, and a smile cracking across a face as learning all of a sudden happens. Good teachers practice their

craft not for the money or because they have to, but because they truly enjoy it and because they want to. Good teachers couldn't imagine doing anything else.

ROLE OF TECHNOLOGY AND ICT IN THE INTEGRATION PROCESS OF VARIOUS SKILLS OF 21ST CENTURY :

The 21st Century is predominantly an era of Information and Communication Technology (ICT) and continues in coming decades. The impact of ICT is felt in all spheres of human life and resulted in growth of other technologies. The advancement of new communication technologies facilitated the interaction of different minds situated across the globe, where mind meets mind resulting in information sharing or knowledge sharing, which is a fillip for growing knowledge. As educational Institutions are the Knowledge centres, these new communication technologies are bound to play a vital role not only in multiplying the knowledge but addressing the issues such as reach to the un-reach, access of quality education, community education and so on.

EMERGENCE OF SOME MORE NEW TECHNOLOGIES FOR DEVELOPING THE SKILLS OF 21ST CENTURY

- TV through telephone line
- FM radios in mobile phone, visual radio (photo or image is supplemented through voice)
- Internet on TV and TV on Internet (IPTV: Internet protocol, TV, Set top box)
- Availability of DTH sets with features of addressability
(addressing each and every subscriber without disturbing normal transmissions),
interactivity,
electronic programme guide, virtual channels, blackout, parental control, etc.)
- Conditional Access System: Interactive TV service, shopping, games sports, (programmes can be targeted for particular viewers)
- Video on demand (VOD) programmes: Repeat programmes, sending live data feeds or pre-recorded archived files over the Internet or local networks Targets particular home allows users to play, pause and stop.
- Web casting or Video streaming: Sending live data feeds or pre-recorded, archived files over internet or local networks for immediate play back .
- Data casting: Digital content such as graphics, video, audio and web pages can be distributed by digital broadcasting on cellular networks.
- Television on mobile phones
- Narrowcasting be catering to specific audience or viewers or individualized media

- Multitasking facility ex. Radio and TV on mobile
 - "TV Print CAST" developed by HP Labs India - Use of TV as delivery mechanism for print document This technology allows data broadcast over the existing television broadcast network. So that the data can be received, stored, retrieved or printed depending on the need. The receive end could be either a TV or a Personal Computer. This technology has the ability to augment TV viewing experience with a 'print' without disrupting the TV viewing action. The technology required is TV set a TV print CAST interface; a Print Ready Set TOP box.

CONCLUSION

The changing expectations of the society and the changing demands of the global market has enhanced the importance of educating the children to meet these demands. Every country including India needs a productive citizen who can help the country to progress and compete with the international community. Hence the teachers should be well equipped to prepare the children for this ever growing knowledge society by various integrated skills. The age old strategies of teaching-learning may not be suitable to meet these needs. The information over flow and techniques of accessibility are to be met effectively Hence we should make a plan to modify the teacher education curriculum, specially designed for the various integrated skills of 21st century. It is through updating teacher education one can produce productive citizens and skilled young generation to this country.

REFERENCES:

- Sharma,V.(2013).Improving quality and excellence in higher education:Evaluation of recent developments in India. *Gian Jyoti E-Journal*,3(2),12-20.
- Sheikh,Y.A.(2017).Higher Education in India: challenges and opportunities. *Journal of Education and Practice*,8(1), 39-42.
- Singh,J.D.(2011). Higher education in India-Issues, challenges and suggestions higher education.LAMBERT Academic Publishing, Germany.Retrieved from https://www.researchgate.net/publication/282293148_Higher_Education_in_India_-_Issues_Challenges_and_Suggestions.
- Sreenivas,T., & Babu,N.S.(2015).Higher education in India – Quality perspective. *International Journal of Advanced Research Management and Social Sciences*.4(7),27-43.Retrieved from <http://www.garph.co.uk/IJARMSS/July2015/3.pdf>
- Wallace, M. J. (2006). Action research for language teachers. Tenth edition. New York: Cambridge University Press.
- Web source : <https://www.aeseducation.com/career-readiness/what-are-21st-century-skills>

DIGITAL LEARNING RESOURCES AND ITS SIGNIFICANCE IN IMPROVING THE QUALITY IN TEACHING LEARNING PROCESS IN HIGHER EDUCATION

Dr. G. Selvi Claire Vellut

ABSTRACT

In the present scenario, many changes are taking place in the education system. Due to the fast growing technological society, lot of improvements are taking place in the information and communication technology. Each and every citizen of our country is no doubt bounded by the new technological devices which are imparting countless information. Our Government is continuously taking strenuous efforts to initiate new digital technologies to improve quality education to the people. Especially, the department of Information and technology has introduced digital learning resources to enrich quality education to all sections of our people at a large extent. This article deals with the digital learning resources initiated by Government of India in higher education and its significance in improving the quality in teaching and learning process in higher education.

Keywords: Quality Education ,Communication Technology,Digital Learning Resources , Higher Education

INTRODUCTION

We are living in an era of technological wonders which influence each and every aspect of our life. It is evident that the impact of technological progress has a significant effect on the educational, social and economic changes and growth of the world. It is no doubt that we are surrounded with information and communication technology in our life. Many innovations are taking place rapidly in this sector. Our government is taking many efforts and initiates new high quality digital learning resources for the teaching learning process to impart quality education to our people through National Mission on Education. Digital learning resources not only motivate the learners but also help to identify and fills the gaps in the learning process. It is no doubt that face to face interaction with teachers is important and at the same time digital resources also helps the learners outside the classrooms during the course of study and for the continuing education after the formal education. To reach the unreached it is clear that digital learning resources plays important role in our life.

Dr. G. Selvi Claire Vellut, Associate Professor, P.S.R College of Education, Sevalpatti

To keep in mind to enrich the quality of higher education, our Government has initiated high quality digital e-contents and delivering the contents as short term, refresher courses etc., to the learners as Massive Open Online Courses (MOOCs) through NPTEL, Swayam Portal and other open educational resources.

DIGITAL LEARNING RESOURCES

NPTEL-NPTEL is an acronym for National Program on Technology Enhanced Learning and it is the Indian Government sponsored educational program to enhance the quality of engineering education. This curriculum consists of video and web courses and this program aims to enhance the quality of engineering education in our country.

SWAYAM-SWAYAM IS Study Webs of Active-learning for Young Aspiring Minds. It is an integrated platform for online courses using information and communication technology. It covers all higher education subjects and skill sector courses to ensure the access and quality higher education to every student at affordable cost. It offers several online courses for students and teachers of all levels. The courses are designed in such a way that it is highly interactive. All courses are designed by the expert faculties.

SWAYAM PRABHA-SWAYAM PRABHA is a group of 32 DTH channels telecasting high-quality educational programmes. These programmes are telecasted on 24X7 basis using GSAT-15 satellite. A new content is delivered everyday for at least 4 hours and it will be repeated 5 more times for the convenience of the students. The contents are provided by NPTEL, IITs, UGC, CEC, IGNOU, NCERT and NIOS. The contents cover both graduate and post-graduate level and diverse disciplines. All courses are certified through SWAYAM.

NATIONAL DIGITAL LIBRARY OF INDIA-National Digital Library is a pilot project initiated by Ministry of Human Resource Development under its National Mission on Education through information and Communication Technology. It consists of free collection of e-books, e-contents, articles, research papers in many Indian languages and in English. It is arranged in accordance to support for all academic levels and all types and disciplines of learners. The main focus of this digital library is to facilitate the learners to get the right resource with least effort and in minimum time.

VIRTUAL-LAB-Virtual Lab provides remote-access to labs in various disciplines of Science and Engineering technology. This lab would cater to the needs of students of UG and PG level as well as to research scholars. It helps to understand the basic and advanced concepts.

E-PG PATHSHALA-e-PG PATHSHALA is an initiative under National Mission on Education through ICT being executed by UGC. The content and key component of education system, high quality, curriculum-based, interactive e-content in 70 subjects across all disciplines of social sciences, arts, fine arts and humanities, linguistics, languages, natural and mathematical sciences.

CEC-Consortium for Educational Communication (CEC) established by UGC with the goal of addressing the needs of Indian higher education through the use of powerful medium of Educational Television along with the pertinent use of emerging information and communication technology which meets the learners needs.

A-VIEW-A-View is a part of Talk to a teacher project coordinated by Ministry of Human Resource Development under the National Mission on Education through Information and Communication Technology (NME-ICT) along with various other projects like Virtual Lab, Haptics and Natural Language Processing etc.,

SPOKEN TUTORIAL-The spoken Tutorial is about teaching and learning a particular Free and Open Source Software(FOSS) like basic computer skills package, introduction to computers, computer programming languages, via an easy tool-spoken tutorials.

SHODGANGA-Shodganga is an online and open repository of research theses uploaded by all Indian Universities. It has been made mandatory by UGC to upload all full thesis work of all scholars. The research work of Ph.D scholars all over India is available in open repository and can be accessed freely.

SHODGANGOTRI-The synopsis and research proposals can be uploaded on shodgangotri portal which is also a part of research. This learning resource helps to know the trends and directions of the researches being conducted in various colleges and universities in India and also helps to avoid duplication of research.

E-GYANKOSH-e-Gyankosh is a national digital repository to store, index, preserve, distribute and share the digital learning resources developed by open and distance learning institutions in our country.

SIGNIFICANCE AND ADVANTAGES OF DIGITAL LEARNING RESOURCES

To improve the quality in education, it is very essential to incorporate many digital learning resources apart from the traditional ones to meet our high populated nation. National convention on digital initiatives for higher education highlighted that “The aim to raise the Gross Enrolment Ratio in the higher education, and to enhance the quality of education, a large scale expansion of high quality education opportunities are required.” To meet the challenges in higher education it is essential to implement new resources that are available in and around us. As it is evident that information and communication technology has emerged as the most powerful medium of transforming the knowledge to the masses, we should use the ICT way of imparting quality education to our learners to achieve the aim of high quality education to our learners in all levels of learning. Keeping this view, our Government of India has initiated number of e-content development projects under National Mission on Education through Information and Communication Technology(NME-ICT).

Digital learning resources created by our Government for the learners both teachers and students to engage in purposeful learning experiences that help the learners to develop in various ways to meet the challenges in the social perspective. Digital learning resources give clear goals, necessary skills that translate the goals into sound curriculum and pedagogy, enhancing the leadership quality of teachers through faculty development programs and workshops, and also encourage the school and educational administrators to focus on supporting the creation of meaningful learning opportunities to their learners.

ADVANTAGES OF DIGITAL LEARNING RESOURCES IN HIGHER EDUCATION

- Encourages innovation in curriculum
- Enhances the practice of learning and teaching
- Increases the accessibility
- Reaches the unreached
- Meet out the needs of all levels of learners
- Encourages research in all areas of education

- develops the professional skills of teachers
- Improves the quality of learning and teaching
- Brings awareness about the wide availability of learning resources
- Encourages self learning
- Helps the learners for higher order thinking
- Initiatives for problem solving techniques
- Encourages self assessment and independent learning
- Brings interactive and effective learning environment
- Creates self confidence in learners
- improves individual overall development

CONCLUSION

Digital learning resources have brought innovative possibilities in the learning and teaching and research in all fields of higher education. It is evident that digital learning resources deliver a broad array of learning environments in higher education to improve learner's knowledge and quality of education. Our Government is taking all efforts to improve the quality of higher education. If it is integrated widely in the formal education system, the aim of quality in higher education will attain to greater heights. This is possible by the joint venture of people as a whole.

WEB REFERENCES

- www.nptel.ac.in
- <https://ndl.iitkgp.ac.in/>
- <http://shodhganga.inflibnet.ac.in>
- <http://shodhgangotri.inflibnet.ac.in>
- <http://Spoken-tutorial.org>
- <https://swayam.gov.in/>
- <https://swayamprabha.gov.in/>
- www.vlab.co.in
- www.aview.in
- <https://egyankosh.ac.in>
- <http://epgp.inflibnet.ac.in/>

FACTORS INFLUENCING THE SUCCESS OF INCLUSIVE EDUCATION PRACTICES

Mrs.C.Girija

ABSTRACT

Inclusive Education (IE) is a new approach towards educating the children with disability and learning difficulties with that of normal ones within the same roof. It brings all students together in one classroom and community, regardless of their strengths or weaknesses in any area, and seeks to maximize the potential of all students. It is one of the most effective ways in which to promote an inclusive and tolerant society. In this article discusses in detail the concept of inclusive education, including importance, challenges and keys to successful inclusion of inclusive education in India.

Key words: Inclusive Education, Learning Difficulties, Disabilities, Inclusion

INTRODUCTION

According to UNESCO, Inclusive Education means that the school can provide good education to all the pupils irrespective of their varying abilities with ensured equal opportunities to learn together. Inclusive education is an ongoing process. Teachers must work actively and deliberately to reach its goals.

BRINGING IN INCLUSIVE EDUCATION

Nothing worth having comes easy. When we talk about Inclusive Education, the same rule follows. Beyond being an education philosophy, it is a life skill that can have the most positive, far-reaching consequences. When children interact daily, socially and academically with peers who are diverse and different, a certain magic spontaneously happens. They learn to understand – and invariably also appreciate – that each individual comes with their own characteristics, strengths and limitations. They grow up and take these skills and sensibilities along with them as adults into their wider spheres. They have, to a large extent, already inculcated greater sensitivity, better understanding, and greater tolerance.

Mrs.C.Girija, Assistant Professor of Tamil, V.O.C. College of Education, Thoothukudi

None of this comes easy. Implementing inclusivity in education in the real world would call for resources, the will and proper monitoring. It would require a learning resource centre or an in-house team of specialists who could address the unique needs of special needs children. Enthusiastic, skilled and sensitized teaching staff would be needed to teach inclusively. The curriculum would need to include locally relevant themes and contributions by marginalized and minority groups. Parental involvement would need to be maximised. Given the challenges compounded by low funding, and often lower will or support, inclusivity is all too often excluded completely.

PREPARING TO ADVANCE INCLUSIVE EDUCATION

It would mean holding governments accountable for implementing antidiscrimination legislation, and legal mandates for inclusion. Schools would need to receive adequate and sustainable financial support. Parents would need to be empowered to assert their children's right to education in inclusive settings. Inclusive education would need to be made a shared responsibility, including educators, social workers, parents and students to participate in its design, delivery and monitoring.

CHALLENGES:

- i. Inclusive Education should include subjects with high social and community content because they need to be sensitive to the needs of students and the environment.
- ii. Quality, equality and equity concepts should be translated into specific actions of educative interventions.
- iii. The collaborative work among educators facilitates inclusion and needs to be promoted in the Teacher Preparation Programmes.
- iv. The teacher learns when teaching and the students teach when they learn.

BENEFITS FROM INCLUSIVE EDUCATION:

- i. Develop individual strengths and gifts, with high and appropriate expectations for each child.
- ii. Work on individual goals while participating in the life of the classroom with other students their own age.
- iii. Involve their parents in their education and in the activities of their local schools.

- iv. Fostering a school culture of respect and belonging. Inclusive education provides opportunities to learn about and accept individual differences, lessening the impact of harassment and bullying.
- v. Develop friendships with a wide variety of other children, each with their own individual needs and abilities.
- vi. Positively affect both their school and community to appreciate diversity and inclusion on a broader level.

KEYS TO SUCCESSFUL INCLUSION

The Individuals with Disabilities Education Act (IDEA) requires that a continuum of placement options be available to meet the needs of students with disabilities. The law also requires that:

"to the maximum extent appropriate, children with disabilities ... are educated with children who are not disabled, and that special classes, separate schooling, or other removal of children with disabilities from the regular environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be attained satisfactorily. IDEA Sec. 612 (5) (B)."

One of the educational options that is receiving increasing attention is meeting the needs of students with disabilities in the regular classroom. This digest is written for the practitioner who is working in the regular class environment with students who have disabilities. Years of research have contributed to our knowledge of how to successfully include students with disabilities in general education classes. Listed below are the activities and support systems commonly found where successful inclusion has occurred.

ATTITUDES AND BELIEFS

- The regular teacher believes that the student can succeed.
- School personnel are committed to accepting responsibility for the learning outcomes of students with disabilities.
- School personnel and the students in the class have been prepared to receive a student with disabilities.
- Parents are informed and support program goals.

- Special education staffs are committed to collaborative practice in general education classrooms.

SERVICES AND PHYSICAL ACCOMMODATIONS

- Services needed by the student are available (e.g., health, physical, occupational, or speech therapy).
- Accommodations to the physical plant and equipment are adequate to meet the student's needs (e.g., toys, building and playground facilities, learning materials, assistive devices).

SCHOOL SUPPORT

- The principal understands the needs of students with disabilities.
- Adequate numbers of personnel, including aides and support personnel, are available.
- Adequate staff development and technical assistance, based on the needs of the school personnel, are being provided (e.g., information on disabilities, instructional methods, awareness and acceptance activities for students, and team-building skills).
- Appropriate policies and procedures for monitoring individual student progress, including grading and testing, are in place.

COLLABORATION

- Special educators are part of the instructional or planning team.
- Teaming approaches are used for problem-solving and program implementation.
- Regular teachers, special education teachers, and other specialists collaborate (e.g., co-teaching, team teaching, teacher assistance teams).

INSTRUCTIONAL METHODS

- Teachers have the knowledge and skills needed to select and adapt curricula and instructional methods according to individual student needs.
- A variety of instructional arrangements are available (e.g., team teaching, cross-grade grouping, peer tutoring, and teacher assistance teams).
- Teachers foster a cooperative learning environment and promote socialization.

MAKING IT WORK: A SAMPLE SCENARIO

- Classrooms that successfully include students with disabilities are designed to welcome diversity and to address the individual needs of all students, whether they have disabilities or not. The composite scenario below is based on reports from several teachers. It provides a brief description of how regular and special education teacher's work together to address the individual needs of all of their students.
- The teachers use their joint planning time to problem-solve and discuss the use of special instructional techniques for all students who need special assistance. Monitoring and adapting instruction for individual students is an ongoing activity. The teachers use curriculum-based measurement to systematically assess their students' learning progress. They adapt curricula so that lessons begin at the edge of the student's knowledge, adding new material at the student's pace, and presenting it in a style consistent with the student's learning style. For some students, preorganizers or chapter previews are used to bring out the most important points of the material to be learned; for other students, new vocabulary words may need to be highlighted or reduced reading levels may be required. Some students may use special activity worksheets, while others may learn best by using media or computer-assisted instruction.
- In the classroom, the teachers group students differently for different activities. Sometimes, the teachers and paraprofessionals divide the class, each teaching a small group or tutoring individuals. They use cooperative learning projects to help the students learn to work together and develop social relationships. Peer tutors provide extra help to students who need it. Students without disabilities are more than willing to help their friends who have disabilities, and vice versa.
- While the regular classroom may not be the best learning environment for every child with a disability, it is highly desirable for all who can benefit. It provides contact with age peers and prepares all students for the diversity of the world beyond the classroom.

REFERENCES

- Adamson, D.R., Matthews, P., and Schuller, J. (2000). Five ways to bridge the resource room to regular classroom gap. *Teaching Exceptional Children*, 22 (2), 74-77.

- Cook, L. and Friend, M. (2000). *Interactions: Collaboration Skills for School Professionals*. White Plains, NY: Longman Publishing.
- Conn, M. (2002). How four communities tackle mainstreaming. *The School Administrator*, 2, 22-24.
- Friend, M., and Cook, L. (2010). The new mainstreaming: How it really works. *Instructor*, 101 (7), 30-36.
- Giangreco, M.F., Chigee, J.C., and Iverson, V.S. (2003). *Choosing options and accommodations for children: A guide to planning inclusive education*. Baltimore: Paul H. Brookes.
- McLaughlin, M., and Warren, S.H. (2002). *Issues and options in restructuring schools and special education programs*. Available from The Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091-1589. (ERIC Number ED 350774).
- Thanavathi, C. (2018). *Teacher Education in India: Secondary Level*. Salem: Samyukdha Publications.
- York, J., Doyle, M.B., and Kronberg, R. (2012). A curriculum development process for inclusive classrooms. *Focus on Exceptional Children*, 25(4).

ABSTRACT

In this digital era, ICT use in the classroom is important for giving students opportunities to learn and apply the required 21st century skills. Change is the need for the day. The rapid pace at which technology is transforming the process of learning in many countries is almost unbelievable. The imperceptible momentum gathered by the engines of technology while at work in education will change the entire learning scenario like nothing else during the next few years. Hence studying a 21st century education, value of 21st century education and students. Therefore, the main purpose of this study is to analyze the integration of 21st century skills in education.

Keywords: 21st century education, 21st century skills, 21st century students.

INTRODUCTION

Change is the need for the day. The rapid pace at which technology is transforming the process of learning in many countries is almost unbelievable. The imperceptible momentum gathered by the engines of technology while at work in education will change the entire learning scenario like nothing else during the next few years. What is really amazing is that the developments are being telescoped into shorter and shorter time spans and this is the crux of the matter. As a result, the learning tools at the command of the children are getting more effective and sophisticated. At the root of this revolution are the personal computer, the television set, video cassettes, the satellite network and what not. And there is no stopping this avalanche of change as the world approaches the 21st century. Our teachers cannot keep away from these changes.

A 21ST CENTURY EDUCATION

The skills and competencies that are generally considered "21st Century skills" are varied but share some common themes. They are based on the premise that effective learning, or deeper learning, a set of student educational outcomes including acquisition of robust core academic content, higher-order thinking skills, and learning dispositions.

This pedagogy involves creating, working with others, analyzing, and presenting and sharing both the learning experience and the learned knowledge or wisdom, including to peers and mentors as well as teachers. This contrasts with more traditional learning methodology that involves learning by rote and regurgitating info/knowledge back to the teacher for a grade. The skills are geared towards students and workers to foster engagement; seeking, forging, and facilitating connections to knowledge, ideas, peers, instructors, and wider audiences; creating/producing; and presenting/publishing. The classification or grouping has been undertaken to encourage and promote pedagogies that facilitate deeper learning through both traditional instruction as well as active learning, project-based learning, problem based learning, and others. A 21st century education is about giving students the skills they need to succeed in this new world, and helping them grows the confidence to practice those skills. With so much information readily available to them, 21st century skills focus more on making sense of that information, sharing and using it in smart ways.

The coalition P21 (Partnership for 21st Century Learning) has identified four ‘Skills for Today’:

- i. Creativity
- ii. Critical thinking
- iii. Communication
- iv. Collaboration

These four themes are not to be understood as units or even subjects, but as themes that should be overlaid across all curriculum mapping and strategic planning. They should be part of every lesson in the same way as literacy and numeracy. Creativity is about thinking through information in new ways, making new connections and coming up with innovative solutions to problems. Critical thinking is about analysing information and critiquing claims. Communication understands things well enough to share them clearly with other people. Collaboration is about teamwork and the collective genius of a group that is more than the sum of its parts.

THE VALUE OF A 21ST CENTURY EDUCATION

Success looks different now than it did in the past. High-achieving people are frequently choosing to opt out of the traditional job market and create their own jobs. Successful people increasingly expect to be able to:

- i. Live and work anywhere in the world
- ii. Travel as often as they like, for as long as they like
- iii. Change what they're working on to keep up with their interests and abilities
- iv. Enjoy earning potential that is not capped by a salary figure
- v. Work with peers across the globe
- vi. Outsource things they don't like doing
- vii. Choose their own hours and office

21ST CENTURY STUDENTS

Generation Z – born between 1995 and 2009 – most do not remember life without the internet, and have had technology like smart phones, iPads, smart boards and other devices available throughout most of their schooling.

Generation Alpha – born since 2010 – they are younger than smart phones, the iPad, 3D television, Instagram, and music streaming apps like Spotify. This is the first generation likely to see in the 22nd century in large numbers.

Growing up with this level of technology means growing up with a completely unprecedented amount of information at their fingertips. There are kids who have never been more than a few seconds away from the answers to their questions, with everything just a quick search away. They are able to teach themselves about any topic they are interested in without even leaving their bedroom. The current cohort of students come from Generation Z and Generation Alpha. These two generations have grown up with advanced technology as a given in their homes and classrooms. They are digital natives, as comfortable using apps and code as their grandparents were flipping pages.

Generations Z and Alpha are also the most internationally connected in history. They encounter people online from all over the world, and can easily make friends on the other side of the planet before they have even left their home state. Schools and parents are also increasingly offering children and young people the opportunity to travel, creating a truly borderless experience of learning.

The students in our schools today are intelligent, independent and extremely capable. They are skilled with technology and comfortable with global and intercultural communication. We can expect that future generations are going to have even more experience in these areas.

DIGITAL TECHNOLOGY

While digital integration is also fundamental to a thorough 21st century education, it is not enough to simply add technology to existing teaching methods. Technology must be used strategically to benefit students. Students are increasingly advanced users of technology even as they enter school for the first time, so this can often mean being open to the possibilities presented rather than attempting to teach and prescribe the use of certain programs. Many a classroom 'technology class' has baffled children by attempting to teach them about programs, websites and hardware that are no longer relevant or that they understand far better than the teacher does.

21ST CENTURY TEACHING: INTEGRATING TECHNOLOGY

Once the learning experience has been completed, the information needs to be distributed. That's where the technology thread enters. The students have many options in sharing their information. A simple Power Point presentation can be created, podcasts can be made, the use of a wiki is a possibility or creating a blog about the findings could be the avenue of distribution of thought. The information that students create uses the 21st century skill of media literacy. Finding the best use of technology to deliver the findings to the world requires the ICT portion of 21st century skills as students learn how to effectively use technology. There might even need to be some research involved with the activity, so information literacy becomes a slice of the process as well.

21ST CENTURY TEACHING: INTERDISCIPLINARY INSTRUCTION

Depending on the type of science activity that the students are experiencing, adding elements of the interdisciplinary themes would not be much of a stretch either. Most topics can be slanted toward global awareness. Simply looking at how the results of the study might affect different parts of the world could bring some great thinking skills to the class. Adding the financial/economic theme is easy as nearly anything can be hooked into economics, with a little creative problem solving by the teacher.

Environmental issues are science, so hooking that theme into a hands-on activity is inherent in the discipline. Examining implications of the activity on health, whether it be personal health or the physical health of the community, might be a connection that can be made. That might even suggest some ethical issues, which could be tied to the theme of civic

literacy. Granted, some of the connections might be a challenge, but all that needs to be done is to ask the students to find those connections and support their ideas. They will do it. They will do it with excitement because the learning is in their hands. They will be motivated, and they will be excited to show their innovative thoughts. The 21st century skills will be used to develop the connections with the themes, and in so doing, deeper levels of thinking and knowledge will be created.

21ST CENTURY TEACHING IN EVERY SUBJECT

It is evident that no extra teaching would need to be done to have students practice and perfect 21st century skills when science is the subject. A teacher who simply follows science protocol cannot help but fold the skills into a lesson. Thus, the idea of adding one more thing to teach simply holds no merit. The challenge lies within the other subjects. Yet, when one looks at the skills such as critical thinking, problem solving, communicating, collaborating, innovating and self-direction, shouldn't any decent program have those as integral components to a successful classroom. It shouldn't be hard, if the teacher has the skills of critical thinking, problem solving and innovation, to find areas to implement the 21st century skills.

Teaching 21st century skills is not a challenge; the challenge is narrowing the scope of focus for each lesson as the skills so seamlessly fall into place within any lesson. That's the way it should be.

CONCLUSION

The ability to think critically and creatively, to collaborate with others, and to communicate clearly sets students up for success in their careers, but also empowers them to lead happier, healthier lives. Bringing our school into the 21st century requires taking the lead instead of trailing behind, actively seeking out new ways of doing things and staying in touch with the world outside of the education system. Change on a broad scale requires leadership in the classroom and across the school community, but every teacher can take steps immediately to help their students succeed.

REFERENCES

- Agarwal, J. C. (2003). *Basic Ideas in Education*. New Delhi: Shipra Publications.
- Akashdeep Bhardwaj, et.al. (2017) conducted a study on Impact of Social Networking on Indian Youth - A Survey. *International Journal of Electronics and Information Engineering*, Vol.7, No.1, PP.41-51, Sept. 2017
- Biranchi Narayan Dash, (2004). *Teacher in Education in the Emerging Indian Society*. Vol. I, New Delhi: Neel Kamal Publications Pvt. Ltd.
- Rajab Idd Muyingo and Ali Murat Kirik (2017) conducted a study on Social Media in the Academic Life of International Students in Turkey: A Survey Study. *International Journal of Cultural and Social Studies (IntJCSS)* December 2017 : 3(2): 205-218
- Thanavathi, C. (2017). *Advanced Techniques and Instruction*. Salem: Samyukdha Publications.
- Thanavathi, C. (2018). *Teacher Education in India: Secondary Level*. Salem: Samyukdha Publications.
- <https://www.teachhub.com/teaching-21st-century-skills>.

ABSTRACT

Education has been viewed as one of the major tool for achieving the goal of sustainability. Quality Education for sustainable development means, “Development that meets the needs of the present without compromising the ability of the future generation’s to meet their own needs.”To protect our Earth, Education is a main vehicle to ensure that people can learn, accept and live according to the sustainable principle of living with harmony with human being and nature Education for Sustainable Development allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future. Education has gained considerable attention and has been seen as one of the most important instrument to achieve sustainable development at the global, national and local levels. QESD should be understood as an integral part of quality education and lifelong learning. All educational institutions ranging from preschool to tertiary education and including both non-formal and informal education

Keywords: Education, learning and challenges

INTRODUCTION

Quality Education for Sustainable Development (QESD) is commonly understood as education that encourages changes in knowledge, skills, values and attitudes to enable a more sustainable society for every individual . QESD aims to empower and equip current and future generations to meet their needs using a balanced and integrated approach to the economic, social and environmental dimensions. QESD is holistic and transformational education and concerns learning content and outcomes, pedagogy and the learning environment. QESD plays a major role in achieving sustainable development.

Ms.S.Jebasheela Jenifer,Assistant Professor of Physical Science,St.Ignatius College of Education(Autonomous),Palyamkottai-2.

Dr.E.C.Punitha,Dean, Associate Professor of English, ,St.Ignatius College of Education(Autonomous),Palyamkottai-2.

QESD aims to produce learning outcomes that include core competencies such as critical and systemic thinking, collaborative decision-making, and taking responsibility for present and future generations.

CHALLENGES IN QESD

Education plays a major role in achieving sustainable development. ESD equips individuals not only with the knowledge but also with the competencies of QESD to engage as informed citizens in promoting the transformation to a more sustainable society. A specific concern in this concept is that those who enjoy the fruits of economic development today may be making future generations worse off by over exploiting the earth's resources, degrading and polluting the environment. Education for Sustainable Development means incorporating the chief issues of sustainable development into teaching and learning like global warming, depletion of ozone layer, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. This requires modification in our curriculum and teaching learning methods that will encourage our learners to change their behaviour and consequently make plans and take actions to achieve sustainable development. promote competencies like critical thinking, reasoning, imagining and taking decisions to solve the problems in a collaborative manner. It leads to the shift from teaching to learning. This takes the form of an action-oriented transformative pedagogy, characterized by elements such as self-directed learning, participation and collaboration, problem-orientation, and inter and transdisciplinarity, as well as the linking of formal and informal learning. Such pedagogical approaches are essential for the development of competencies vital for promoting sustainable development of quality education for future generation

MAIN IMPLICATIONS OF ESD FOR THE PRACTICE OF EDUCATION AND PEDAGOGY

QESD AS TRANSFORMATIVE AND COMPETENCE-BASED EDUCATION

QESD aims to identify key competencies needed for learners to become sustainability citizens. Sustainable development has been widely promoted as a holistic concept which aims or targets to integrate social, economic and cultural policies to ensure high-quality growth of the learners.

WHOLE-INSTITUTION APPROACH

QESD is not just a matter of teaching sustainable development and adding new content to courses and trainings. Schools and universities, for instance, should see

themselves as experiential places of learning for sustainable development, and should therefore orient all their processes towards principles of sustainability. The educational institution as a whole needs transformation then QESD will be more effective, . Whole-Institution approach aims to mainstream sustainability into all aspects of the educational institution. It involves rethinking the curriculum, campus operations, organizational culture, student participation, leadership and management, community relationships and research. In this way, the institution itself functions as a role model for the learners. Sustainable learning environments, such as eco-schools or green campuses, allow educators and learners to integrate sustainability principles into their daily practices and facilitate capacity-building and competence development, and value education in a comprehensive manner. Knowledge and skills Values and motivations Opportunities Sustainable key competencies Sustainability performance

ACTION-ORIENTED TRANSFORMATIVE PEDAGOGY

Educators should stimulate and support those reflections. Learner-centred approaches change the role of an educator who transfers structured knowledge to that of a facilitator of learning processes (Barth, 2015).

▪ LEARNER-CENTRED APPROACH

Learner-centred pedagogy sees students as autonomous learners and emphasizes the active development of knowledge rather than its mere transfer and/or passive learning experiences. The learners' prior knowledge as well as their experiences in the social context are the starting points for stimulating learning processes in which the learners construct their own knowledge base. Learner-centred approaches require learners to reflection their own knowledge and learning processes in order to manage and monitor them.

▪ ACTION-ORIENTED LEARNING

In action-oriented learning, learners engage in action and reflect on their experiences in relation to the intended learning process and personal development. The experience might come from a project (e.g. in-service learning), an internship, facilitation of a workshop, implementation of a campaign and so on. Action-learning draws on concrete experience, observation and reflection, formation of abstract concepts for generalization and application in new situations (Kolb, 1984). Action learning increases knowledge acquisition, competency development and values clarification by linking rather abstract concepts to

personal experience and the learners' life. The role of the educator is to create a learning environment that prompts learners' experiences and reflexive thought processes.

▪ **TRANSFORMATIVE LEARNING**

Transformative learning can be defined primarily by its aims and principles, not by a concrete teaching or learning strategy. It aims to empower learners to question and change their ways of seeing and thinking about the world, in order to further develop their understanding of it. The educator acts as a facilitator who empowers and challenges learners to change their worldviews, and prepare the learner for disruptive thinking and the co-creation of new knowledge.

KEY COMPETENCIES FOR QESD EDUCATORS

Educators are powerful change agents with the ability to deliver the educational response needed in the context of sustainable development. Their knowledge and competencies are crucial for restructuring educational processes and educational institutions towards sustainability.

Teachers must develop key sustainability competencies, including knowledge, skills, attitudes, values, motivation and commitment. However, in addition to general sustainability competencies, they also need ESD competencies, which can be described as a teacher's capacity to help people develop sustainability competencies through a range of innovative teaching and learning practices.

LEARNING OBJECTIVES FOR TEACHERS TO PROMOTE QESD

- Know about sustainable development and the related topics and challenges;
- Understand the discourse on, and the practice of QESD in the local, national and global context;
- Develop an integrative view of the key issues and challenges taking into account social, ecological, economic and cultural dimensions from the perspective of the principles and values of sustainable development;
- Develop disciplinary, interdisciplinary and transdisciplinary perspectives on issues of global change and their local manifestations;

- Reflect on the challenges facing promotion of the concept of sustainable development and the importance of their field of expertise for facilitating sustainable development and their own role in this process;
- Understand the ways in which cultural diversity, gender equality, social justice, environmental protection and personal development are integral elements of ESD and how they can be made a part of educational processes;
- Practise an action-oriented transformative pedagogy that engages learners in participative, systemic, creative and innovative thinking and acting processes in the context of local communities and learners' daily lives;
- Act as a change agent within a process of organizational learning to advance the school towards sustainable development;
- Identify local learning opportunities related to sustainable development and build cooperative relationships;
- Evaluate and assess learners' development of cross-cutting sustainability competencies and specific sustainability-related learning outcomes
- Reflect on the dynamics of formal, non-formal and informal learning for sustainable development, and apply this knowledge in their own professional work;

CONCLUSION

QESD can help to facilitate sustainable development by developing the cross-cutting sustainable competencies needed to deal with a wide range of sustainability challenges. To empower people worldwide to take action in favour of sustainable development, all educational institutions should undertake to deal intensively and foster the development of quality education competencies. Therefore, it is crucial not only to include sustainability-related content in the curricula, but also to employ an action-oriented transformative pedagogy. To put this pedagogy into practice, educators are needed who not only know about QESD, but who also have developed teaching competencies related to ESD in their own education and training. and also successfully implementing QESD programs and reorienting curriculum to achieve sustainability.

REFERENCES

- * Kolb, D.A. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. New Jersey: Prentice-Hall
- * Barth, M. 2015. *Implementing Sustainability in Higher Education: Learning in an Age of Transformation*. London: Routledge.
- * UNESCO. 2014a. *Global Citizenship Education: Preparing learners for the challenges of the 21st century*. Paris: UNESCO.
- * UNESCO. 2014b. *Teaching and Learning: Achieving Quality for All. EFA Global Monitoring Report 2013-2014*. Paris: UNESCO.
- * UNESCO. 2017. *Education for Sustainable Development Goals. Learning Objectives*. Paris: UNESCO. <http://unesdoc.unesco.org/images/0024/002474/247444e.pdf> (accessed 17 May 2017).
- * UNECE (United Nations Economic Commission for Europe). 2005. *UNECE Strategy for Education for Sustainable Development*. Geneva: UNECE. www.unece.org/fileadmin/DAM/env/documents/2005/cep/ac.13/cep.ac.13.2005.3.rev.1.e.pdf (accessed: 17 May 2017)

ABSTRACT

Artificial intelligence (AI) with a written or oral interface is supposed to make our lives easier in future. Assistants such as *Siri* (Apple) and *Galaxy* (Samsung) already allow smartphone functions to be operated via language recognition and synthesis software, while Amazon's *Alexa* dialogue systems will soon be controlling our smart homes: companies based in Silicon Valley paint a vision of the future in which intuitive language interaction with a virtual interlocutor plays a vital role. AI is not only used to give a verbal command to one's smartphone to play a particular playlist, but also features in far more complex scenarios such as online games and interactive toys with a language interface (like Mattel's *Hello Barbie*), and as virtual tutors in e-learning environments (such as the virtual tutor *Ed the Bot* in SAP learning software). It therefore seems natural to take advantage of innovative technologies in foreign language teaching, too. They are able to make learning possible anywhere and at any time. Commercial providers and non-commercial institutions are developing applications that follow (and combine) entirely different technical approaches. This article provides a critical overview that will help to differentiate between them.

Keywords ; Artificial Intelligence, e-learning, Learning Management Systems

INTRODUCTION

Before we jump into the use of artificial intelligence in learning and development, it's important to understand what AI is. AI or artificial intelligence simply refers to the capability machines have to learn and process data on their own using data sets. Once a machine learns from the data they collect, they can make "decisions" on their own, based on the data they've collected. Machine learning is simply an extension of AI and refers to machines that are trained to analyze data and trends. These machines build their own algorithms from the data they collect and use it to make "decisions" without human intervention.

R.Gayathiri Ramamoorthy, P.hD Scholar Mother Theresa womens University Kodaikanal
Dr.K.C.Bindhu, Associate Professor and Head ,Mother Theresa Women's University Kodaikanal

LEARNING MANAGEMENT SYSTEMS

Currently, AI plays a small role in learning and development systems through E-learning and learning management systems. These systems are some of the best ways to help students learn because they increase retention up to 60%, allow multiple students to receive instruction at the same time, and offer opportunities for improvements and customized education in the future. Data gathered by your LMS through surveys, ratings, comments, and course metrics needs to be updated by human hands. And even the best artificial intelligence can't make up for poorly created content. Keeping learning and development up-to-date through LMS AI resources takes time and even AI needs a little human help to enhance learning and development.

THE FUTURE OF LEARNING MANAGEMENT

Today's intelligent learning management systems help pinpoint where students need additional education and training as well as where you can optimize your course content in a faster and more accurate way than you can without the assistance of artificial intelligence.

AI'S ROLE IS CONSTANTLY EXPANDING ACROSS EVERY INDUSTRY.

Perhaps the greatest realization for AI in the future of learning and development is that it will help anticipate the user's learning path and behaviors, predict their learning needs and provide content based on how users learn best and increase the effectiveness of e-learning and LMS courses.

ANTICIPATED LEARNING PATH

As AI continues to improve in the future, it will become easier for systems to create customized learning paths for individual users. Transforming learning and development through an anticipated learning path means that artificial intelligence will assess user performance and determine which information path is best for the user. AI with these capabilities will provide recommendations on what kinds of information a user's needs, much like Netflix or Amazon provides recommendations on what shows you should watch based on your viewing behavior. Aside from helping users find better learning paths, artificial intelligence can also assist in learning and development by helping teaching professionals understand what their employees need to learn.

OPPORTUNITY HIGHLIGHT

Through data pattern identification, learning management systems collect data and statistics on students to find learning gaps and opportunities that teachers may not have

noticed or realized. Using pattern identification, and data, artificial intelligence can help identify opportunities to merge new ideas with previous topics to create a well-rounded learning experience for the user. This allows administrators and teachers to cover learning gaps they may not even realize exist.

COURSE EFFECTIVENESS

Artificial intelligence can also assist learning and development efforts by helping teachers find ways to make courses more effective. One of these ways is through gamification. If done properly, gamification can make learning more engaging and increase information retention.

Increasing course effectiveness can also assist teachers directly by making it easier to find opportunities to make the course more effective, fill informational gaps, automatically grade students, help with onboarding, and get the instruction process moving.

ARTIFICIAL INTELLIGENCE IN THE FUTURE OF LEARNING AND DEVELOPMENT

Although there are many unknowns in the future of AI, applying the tools we have to improve the future of learning and development will help us create a more personalized approach to our e-learning and learning management systems. Artificial intelligence shouldn't be looked at as a replacement of humans in the educational process, but as a support system that allows us to take individualized learning to the next level.

CONCLUSION

Not all AI-based training is new, in 2010 the US Navy ran a pilot study to train new recruits in IT skills with an AI tutor. They first assembled a group of expert tutors, ran intensive one-to-one training sessions, then re-created the experience with an AI 'Digital Tutor'. Competitions between recruits trained using the normal blended approach and those who had the Digital Tutor revealed better performance from the Digital Tutor group in every case. This same principle, learning from an expert, is being used by Duolingo's chatbots. Using an AI-powered chat interface, with support for text and voice conversations, you can learn French, Spanish and German in a natural way. As the costs of machine learning and AI tools fall, it's becoming possible for workplace L&D teams to take elements of current training and automate them through AI.

REFERENCES

- <https://towardsdatascience.com/ai-machine-learning-deep-learning>
- <https://towardsdatascience.com/notes-on-artificial-intelligence-ai>
- <https://www.edx.org/learn/artificial-intelligence>
- <https://www.appliedaicourse.com>
- <https://medium.com/datadriveninvestor/differences-between-ai-and-machine-learning>

ABSTRACT

The basis of E-Learning is the opportunity for students to access a traditional classroom environment completely online. In many cases, eLearning refers to online degrees, programs, and certifications that are completely provided online. E-Learning comes in several variations including electronic learning, via the Internet, distance education, electronic learning, online learning, among others. E-Learning consists of courses that are specifically distributed via the internet to somewhere other than the classroom, but maintain a similar learning environment where students can learn with direct interaction from educators. In many cases, a course can be live and students can “electronically” raise their hand and interact in real time with each other. The teacher will still be grading you, assign you tests and homework and give you participation points, all while you are learning in an environment that is comfortable for you.

Keywords : E-Learning, Online Learning, Learning Environment, Distance Education

INTRODUCTION

Individuals can improve and develop their professional skills through E-Learning. E-Learning offers a variety of applications and courses personalized to an individual's needs. E-Learning can help you develop and grow your communication skills, build teamwork skills, develop digital knowledge, gain independent experience and much more. The variety of courses offered are endless. Individuals can even prepare for the GMAT test through E-Learning. E-Learning has provided resources to help individuals professionally grow their minds in the comfort of their homes.

Alimalar .S, P.hD Scholar Mother Theresa women's University Kodaikanal

Dr.K.C.Bindhu, Associate Professor and Head ,Mother Theresa Women'sUniversity,Kodaikanal

5 ELEARNING AUTHORIZING TOOL DEPLOYMENT TYPES TO CONSIDER AND THE MOST POPULAR PRICING PLANS

E-Learning authoring tools help you develop high-quality content for your online training course and stretch your L&D budget. You can repurpose existing materials, use templates to expedite the eLearning development process, and quickly update vital online training resources. In most cases, the tool even offers a built-in asset library, complete with templates, images, and themes. But how do you know which E-Learning authoring tool deployment option is a good fit for your online training program and organizational requirements?

ELEARNING AUTHORIZING TOOL DEPLOYMENT OPTIONS TO CONSIDER

E-Learning authoring tool deployment has a direct impact on accessibility, set-up time, and the overall cost of the tool. All these factors must be taken into consideration before you invest in new software. Here are 5 popular eLearning authoring tool deployment options:

1. SAAS/CLOUD-BASED

Cloud-based eLearning authoring tools are hosted online. You're able to log in remotely on any device to access design tools, asset libraries, and other key software features. This option is also known as SaaS (software as a service). Many vendors provide subscription-based services, which makes it the ideal option for organizations looking for rapid deployment, stress-free maintenance, and low or no upfront costs. You simply pay a monthly subscription fee to keep your account active and utilize the eLearning authoring tool. The vendor also provides updates, upgrades, and tech support so that you don't have to hire an in-house IT team.

2. SELF-HOSTED

Self-hosted eLearning authoring tools are locally installed. You must download the software and set it up according to your specifications. The benefit is that this usually allows for greater customization and your data is securely stored on your own computer/device. This option usually involves a one-time fee for licensing, and you are typically responsible for updates and maintenance.

3. SELF-HOSTED CLOUD-BASED

A hybrid eLearning authoring tool approach wherein you host the software on your own servers. It's still accessible to every member of your team, regardless of their geographical location. You also have the added benefit of safeguarding sensitive data with your own security protocols instead of relying on the vendor's encryption and authentication features. Pricing plans vary depending on the vendor. While some charge a one-time fee, others opt for monthly subscription-based service.

4. MOBILE APP

An eLearning authoring tool that's accessible on any mobile device via a native app. Some eLearning authoring tool vendors also provide this as an add-on deployment option to their cloud-based software. Mobile apps give your collaborators the ability to collaborate from anywhere in the world to create more effective online training content. Just make certain that the app is compatible with all devices and that it's user-friendly.

5. DESKTOP APP

Users are able to install the desktop app on their devices. They can access the online training content even without an internet connection, then resync to the system to update their progress. In some cases, this equates to better customization options and data security features.

POPULAR ELEARNING AUTHORIZING TOOL PRICING MODELS

Pricing and deployment go hand in hand. There are a variety of factors involved in regard to the payment structure, such as payment frequency and ongoing maintenance costs. These are the most common pricing models you'll encounter when choosing a new eLearning authoring tool:

1. ONE-TIME PURCHASED LICENSE

Instead of having to pay a monthly fee, some eLearning authoring tool vendors sell their software outright. You purchase the tool upfront for a one-time licensing fee. The drawback is that you typically have to take care of upgrades yourself and that the tool may not be able to scale to meet your needs. The plus is that you don't have to worry about ongoing subscription costs, which makes it easier to budget.

2. SUBSCRIPTION

eLearning authoring tool vendors charge a monthly or quarterly subscription fee that grants you access to the eLearning authoring tool. This is generally reserved for cloud-based options. As long as your account is in good standing, you can log into the platform and

develop top-notch content. The downside is that the prices can fluctuate over time. For example, if the vendor decides to raise the monthly fee after the first year. However, they generally take care of the updates and upgrades so that the tool stays on the cutting edge.

3. FREE

For organizations on a tight budget, free eLearning authoring tools may be the ideal solution to get you started. However, bear in mind that free isn't always best. These tools often have limited features and functionalities. For example, it may not have a built-in asset library or the User Interface is difficult to master.

4. FREEMIUM

These eLearning authoring tools are free to download or access on the cloud. But there is a catch. The vendor provides the most basic version of the tool and charges extra for upgrades and add-ons. For instance, you can only access the asset repository if you pay a monthly subscription fee or download the package for a one-time fee. As such, it may end up costing you more than a self-hosted or cloud-based tool at the end of the day.

CONCLUSION

The first step in determining which E-Learning authoring tool deployment type and pricing plan are best for you is to create a budget and identify your online training objectives. This allows you to set your sights on eLearning authoring tools that cater to learner preferences, support desired outcomes, and fall into your price range. Thereby, helping you save time during the decision-making process and avoid expensive trial-and-error. One last tip I'd like to leave you with is to check for compatibility. If you already have an LMS, you must ensure that the new eLearning authoring tool will mesh with your existing software, rather than having to deal with data integration and incompatible formats after making your purchase. How can you choose an E-Learning authoring tool that will stand the test of time? Read the article *Choosing The Best E-Learning Authoring Tool: The eLearning Freelancer's Guide* and explore what E-Learning freelancers need to know before choosing an E-Learning authoring software.

REFERENCES

- <https://www.groupdiscussionideas.com/e-learning-substitute-for-classroom/>
- <https://imi-k.edu.in/imik/images/IMIData/pdf/blog/SCEL.pdf>
- <https://www.ed.gov/oii-news/use-technology-teaching-and-learning>
- <https://www.prodigygame.com/blog/ways-to-use-technology-in-the-classroom/>
- <https://www.izito.co.in/ws?q=e%20learning%20management%20systems>

THE ROLE OF EDUCATION IN ECONOMIC DEVELOPMENT

Dr. T. Rajendran,

ABSTRACT

Till recently economists have been considering physical capital as the most important factor determining economic growth and have been recommending that rate of physical capital formation in developing countries must be increased to accelerate the process of economic growth and raise the living standards of the people. But in the last three decades economic research has revealed the importance of education as a crucial factor in economic development. Education refers to the development of human skills and knowledge of the people or labour force. It is not only the quantitative expansion of educational opportunities but also the qualitative improvement of the type of education which is imparted to the labour force that holds the key to economic development. Because of its significant contribution to economic development, education has been called as human capital and expenditure on education of the people as investment in man or human capital.

Key words: Education, Sustainable Development, Educational Cost, Investment

INTRODUCTION

Till recently economists have been considering physical capital as the most important factor determining economic growth and have been recommending that rate of physical capital formation in developing countries must be increased to accelerate the process of economic growth and raise the living standards of the people. But in the last three decades economic research has revealed the importance of education as a crucial factor in economic development. Education refers to the development of human skills and knowledge of the people or labour force. It is not only the quantitative expansion of educational opportunities but also the qualitative improvement of the type of education which is imparted to the labour force that holds the key to economic development. Because of its significant contribution to economic development, education has been called as human capital and expenditure on education of the people as investment in man or human capital.

Dr. T. Rajendran, Assistant Professor [Agricultural Economics], Tamil Nadu Agricultural University, Department of Social Sciences, Agricultural College and Research Institute, Killikulam, Vallanad - 628 252

It is argued by many development economists that more than the financial and other productive resources, the human capital of a country is the real determinant of growth and development. The real wealth of the nation is its population as active agents that apply their skills in production, manages enterprises, develop technology and utilize raw materials for development

EDUCATIONAL EXPANSION

- ✓ Elementary & Secondary Education
- ✓ Tertiary Education [1950's]
- ✓ Vocational - Technical Education [1970's]

Expansion in education that will not match the manpower needs in the future leads to the accumulation of a large number of the educated unemployed.

The Economics of Education The educational cost is not an expense. This is an investment. The objective of education is the development of the human capital whose productivity is raised by education.

PROBLEMS OF EFFICIENCY IN EDUCATION

- ✓ Ineffective methodology
- ✓ Antiquated facilities
- ✓ Low book/ learner ratio
- ✓ Under stocked school libraries
- ✓ Lowly motivated teachers
- ✓ Parent-caused absences
- ✓ Malnutrition
- ✓ The drug menace
- ✓ The language of education

SOME OF THE SUGGESTIONS TO IMPROVE THE QUALITY EDUCATION

1. The Supply of Education the availability of education in the country is not restrained by the number of slots, unlike in other countries where the slots at higher education level are determined by the schools.
2. Labor Squeeze & Education Labor squeeze is the displacement of the less educated with the better educated. When there is over supply of educated manpower, those who have no education have little chance of employment.
3. And the longer one has not worked after completion of studies, the less chance he or she may have to be employed.

4. In a job scarce society, the first factor of allocation is connection. The walk-in applicant may possess the credential and the skill for the job but to land that job, that applicant must be extremely good if he is not sponsored by someone known to the employer. The Hidden Allocator of Employment
5. Exit of workers from domestic labor market to off-shore employment is a job allocator that opens local opportunities to those who have not been employed despite their education. In addition, those who are willing to receive lower compensation than what they may be entitled often get the jobs.
6. Education and Inequality the financially better off have better access to instruction. On the other hand, the poor can afford only substandard schooling.
7. Sources of Planning Concepts for Education
 - ✓ The national economic development plan
 - ✓ The chief executive of the country
 - ✓ Innovations
 - ✓ Legislations by the Congress
8. Orientation of the educational leader
 - ✓ Journal publications
 - ✓ The economic sectors
 - ✓ Technological information
 - ✓ Politicians, social thought leaders and the parents

CONCLUSION

Finally, if the teacher should be real teacher we might achieve something to the younger generation. In this regard, Government might also think over the more control to the privatization of the education system and more facilitate to the infrastructures especially on the primary as well as secondary schooling state onward.

REFERENCES

- Bartel, P.A. and Lichtenberg, F.R., (1987), The Comparative Advantage of Educated Workers in Implementing New Technology. Review of Economics and Statistics , 69:1-11.
- Davis, S. and Haltiwanger, J., (1991), Wage Dispersion within U.S. Manufacturing Plants, 1963-86, Brookings Papers of Economic Activity , Special Issue: 115-180.

- Hamly, C. Coombe, S. Troudi & C. Gunn (eds,) *Proceedings of the 18th TESOL Arabia conference: Achieving Excellence through Life Skills Education* (pp. 22-28). Dubai: TESOL Arabia.
- Herrera, Luis Javier Pentón; Kidwell, Tabitha, 2018. Literature Circles 2.0: Updating a Classic Strategy for the 21st Century, *Multicultural Education*, 25(2), 17-21.
- Howlett, Graham; Waemusa, Zainee, 2019. 21st Century Learning Skills and Autonomy: Students' Perceptions of Mobile Devices in the Thai EFL Context, *Teaching English with Technology*, 19(1), 72-85.
- Laakkonen, Ilona; Taalas, Peppi, 2015. Towards New Cultures of Learning: Personal Learning Environments as a Developmental Perspective for Improving Higher Education Language Courses, *Language Learning in Higher Education*, 5(1), 223-241.

INIGO EDU RESEARCH

The Journal on Education

**"Quality education grants us
the ability to fight
the war on ignorance
and poverty. ..."**

- Charles Rangel



**" Take Risks in your Life
If you Win, You can Lead.
If you Lose, You can Guide."**

- Swami Vivekananda



St. Ignatius College of Education (Autonomous)

Re-accredited with 'A' Grade by NAAC

Palayamkottai, Tirunelveli - 627 002, India.

Office : 0462 - 2560558, Cell : +91 94886 62905

www.ignatiuscollegeofeducation.com