

**3-2-2 FIRST PAGE OF THE PUBLISHED BOOK/CHAPTER WITH SEAL AND  
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**2018-2019**

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## Chapter-18

# Value Analysis: A Comprehensive Model for Valuing and Socio-Emotional Conflict Resolution

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### Introduction

Education transmits culture, heritage, value system, knowledge and skills from one generation to another. Education is a process of preservation and transmission of values to help the learner lead a meaningful life. A person's commitment, values, processing abilities, preferences, concern and devotion count a lot in making him or her an efficient human being. The fabric of human society is woven with value based social interactions. The practice of education based on values and value system help people survive in today's corporate social life.

UNESCO Report entitled: *Learning to be: The World of Education: Today and Tomorrow* (1972), stated 'education is an enterprise of universal dimensions, huge and far-reaching, implicit in which are aims which have universal applications, and there has to be a search for balance among the various intellectual, ethical, emotional and physical components of personality and in a positive perception of mankind's historic fate'. Education in values is founded on humanistic philosophy of education which aims at the overall development of the human being as an individual and as a member of the society. Values, habits and attitudes are acquired through imitation, emulation, intentional instruction and guided learning during the course of child's development but their emphasis may vary with different stages and cultures.

A value has three aspects: a cognitive or thinking aspect, an affective or emotional aspect and a psychomotor or doing aspect. Certainly, a value entails cognition, for a value is centrally a belief in the desirability or lack of desirability of the focus of the value. It does not seem controversial to argue that values also entail emotion. As a verb, valuing refers to caring about something and feeling that it is important. As a noun, a value entails a feeling



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**PROBLEMS OF WOMEN AND GIRL CHILD IN THE SOCIETY**

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*Assistant Professor, St. Thomas college of Teacher Education, Pala, Kerala.***Introduction***"You can tell the condition of nation by looking at the status of its women"**Jawaharlal Nehru*

The status of women, in any given society, is indicative of it and standards of culture and civilization. Swami Vivekananda has said, 'That country and that nation which did not respect woman have never become great, nor will ever be in future'. The liberty enjoyed by women to move about and take part in public life, is the yardstick to measure the progress of that society. Mahatma Gandhi was a great humanist and an ardent advocate of freedom of women and equal status for woman and man. Hence in the study of the 'Social Philosophy of Mahatma Gandhi', it is of great significance to discuss the status of woman and Mahatma's views on the subject.

When we glance at the population chart of any country in the world, we see that women constitute almost 50 per cent of the total population. Therefore, we can say that women constitute half of the mankind (not womankind !). In spite of this fact, their status everywhere has always been inferior to that of man. In some societies women enjoyed better status as compared to their counterparts in other societies, but never, ever equal to that of men in their own society. Women have always been subjected to inequality, discrimination, exploitation, subjugation and in many cases inhuman treatment at the hands of men.

Earlier women were facing problems like child marriage, sati pratha, parda pratha, restriction to widow remarriage, widows exploitation, devadasi system, etc. Crimes against women appear to be a pever-ending problem. This problem has been growing more and more acute in India during the recent years. Women are continuously facing many problems even after having self-confidence, individuality, self-respect, personality, capacity, talent, and efficiency more than men. Crimes against women include violence against women, rape, molestation, dowry harassment, wife-battering, kidnapping female children to sell to brothels, deliberate embarrassment, forcible religious conversion, cheating young women with a promise to marry them or fetch them a job and various types of sexual harassment at their work place and abuse of women including eve-teasing.



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NATIONAL MISSION FOR EMPOWERMENT OF WOMEN (NMEW)

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Introduction

The National Mission for Empowerment of Women (NMEW) was launched by the Government of India (GOI) on International Women's Day in 2010 with the aim to strengthen overall processes that promote all-round development of women. It has the mandate to strengthen the inter-sector convergence; facilitate the process of coordinating all the women's welfare and socio-economic development programs across Ministries and Departments. The Mission aims to provide a single window service for all programmes run by the Government for Women under agencies of various Central Ministries. The National Resource Centre for Women has been set up which functions as a National Convergence Centre for all schemes and programmes for women. It acts as a central repository of knowledge, information, research and data on all gender related issues and is the main body servicing the National and State Mission Authority.

Aims and Objectives

NMEW aims to achieve gender equality, and gender justice and holistic development of women through inter-sectoral convergence of programmes relating to women, forging synergy between various stakeholders and creating an enabling environment conducive to social change. The major concerns of the National Mission for Empowerment of Women are:-

- Access to health, drinking water, sanitation and hygiene facilities for women
- Coverage of all girls especially those belonging to vulnerable groups in schools from primary to class 12
- Higher and Professional education for girls/women
- Skill development, Micro credit, Vocational Training, Entrepreneurship, SHG development
- Gender sensitization and dissemination of information
- Taking steps to prevent crime against women and taking steps for a safe environment for women



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## DEMOCRACY AND WOMEN VOICES

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### INTRODUCTION

"Development without democracy is improbable. Democracy without women is impossible." - *Madeleine K. Albright*

Democracy is a political system that has been adopted by most governments worldwide as the best form of government. It is a method for making collective decisions in which everyone has equal right to play a role. Right to equality, right to freedom and right against exploitation are some of its basic principles. Right to equality ensures equal rights for all the citizens and prohibits inequality on the basis of caste, religion, place of birth, race, or gender. Right to freedom provides us with various rights and Right against Exploitation condemns human trafficking, for the purpose of forced labour, sexual slavery, or commercial sexual exploitation.

But it is a miserable truth that many of the countries which follow democracy has no effective powers to prevent its own members from violating its core values of respect for democracy, fundamental rights, and the rule of law. Defilements exist in every part of the world. Violence against women is a violation of women's fundamental human rights. There are several national and international human rights agreements to prevent and respond to violence against women, and there has been some progress.

The key to ending violence against women is transforming traditional gender roles and power relations, changing the attitudes and beliefs and creation of an environment for women where they can make decisions of their own for their personal benefits as well as for the society. This paper overlooks the significance of women voices, in what all ways and how much, democracy allows women leaders, women activists and women empowerment programmes to raise their voices to create such an environment and also the barriers to overcome for attaining the goal.

### IMPORTANCE OF WOMEN'S VOICES IN SOCIETIES

Entire nations, businesses, communities and groups can benefit from women's voices. Active participation of women is a necessity for the very development of a society, since it enhances both the quality and the quantity of human resources available for development. Hence women's empowerment and achieving gender equality is essential for our society to ensure the development of the country. Without the equal inclusion of



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**MATERNAL MORTALITY RATES (MMR) & INFANT MORTALITY RATES (IMR)**

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Women are at the heart of most societies. Regardless of whether they are working or not, mothers are very influential people in children's lives. Education is one of the most critical areas of empowerment for women. An educated woman has the skills, information and self-confidence that she needs to be a better parent, worker and citizen.. Educating girls is one of the most important investments that any country can make in its own future. Education has a profound effect on girls' and women's ability to claim other rights and achieve status in society, such as economic independence and political representation. An educated woman will also be more productive at work -- and better paid. Indeed, the dividend for educational investment is often higher for women than men.

Educating girls helps to make communities and societies healthier, wealthier and safer, and can also help to reduce child deaths, improve maternal health and tackle the spread of HIV and AIDS. Women's health matters not only to women themselves. It is also crucial to the health of the children they will bear. This underlines an important point: paying due attention to the health of girls and women today is an investment not just for the present but also for future generations. This implies addressing the underlying social and economic determinants of women's health -- including education, which directly benefits women and is important for the survival, growth and development of their children. Rising levels of education improve women's productivity in the home which in turn can increase family health, child survival, and the investment in children's human capital. The social benefits from women's education range from fostering economic growth to extending the average life expectancy in the population, to improving the functioning of political processes

**Infant Mortality Rate (IMR)**

Infant mortality rate refers to the measurement of mortality in the first year of life and is computed by (relating) the number of deaths under one year of age divided by 1000 live births in a given year. There are many reasons for this, and it relates to the reasons for mortality. In areas of poverty or just an overall less financially well situation, one might expect mortality to be heavily influenced by;


  
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## SAMAGRA e RESOURCE PORTAL: A LEAP INTO DIGITAL AGE

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## Introduction

“Be the change that you wish to see in the world”, said Mahatma Gandhi. This computer era is witnessing the greatest change ever seen in the world. Hard work is not enough to achieve the aims, need to smart while executing the work. A human being develops smartness at different stages of life, which we call experience. Smart classes cannot guarantee to make a kid smart, but it give a better and dynamic ambience to the students to learn in a smart way. The concept of smart classroom education is a blessing to the students of 21<sup>st</sup> century. Technology is changing the way life functions. The state education department has added one more golden page its book of excellence and service. KITE (Kerala Infrastructural and Technology for Education) was set up by the state government to promote and implement modernization of educational institutions.

Kerala Infrastructure and Technology for Education (KITE): Kerala Infrastructure and Technology for Education (KITE), formerly IT@School Project, was formed in 2001-02 to fuel ICT enabled education in the schools in the State. IT@School was transformed in to KITE in August 2017.

KITE is the first SPV (Special Purpose Vehicle) Company of the Education Department of the State. KITE also became the first SPV to get funded by Kerala Infrastructure And Investment Fund Board (KIIFB), the apex body for monitoring all the projects envisaged by the Govt. The hitherto scope of General Education Sector has now been extended further with KITE being positioned to fuel ICT support to Higher Education sector also including Arts & Science, Engineering colleges and Universities.

IT@School was formed in 2001, as a Project under General Education Department, to inculcate IT activities in Higher School sections in the State. The first breakthrough of IT@School came in 2005 when Information Technology was made a compulsory subject in Std 10. The launch of EDUSAT operations and broadband connectivity to schools commenced since then, the VICTERS channel operated by IT@School was the first Complete Educational Channel in the

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## INFLUENCE OF SOCIAL NETWORKING SITES AMONG TEACHER TRAINEES IN THE CONTEXT OF COLLABORATIVE LEARNING

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### Introduction

Social media offer new ways for academics to use the internet to communicate and share information. Learners can share what they have designed and also interact with other learners who may further build on their creation, duly acknowledging the source. Social media offers the possibility of better forms of assessment of deep understanding. The key point here is that social media offers all the three pillars of self motivation-autonomy (learners can independently take initiative), mastery (through multiple representations and multiple performances of understanding) and purpose (learners can apply their knowledge and skills to a cause that appeals to them) and can take learner from being extrinsically motivated to being intrinsically motivated to learn and perform. Social media is a platform for interactions, conversations, searching, creating and sharing. It includes the ability and the facility to discuss, create, cooperate on, share and modify information in text, image, audio and video forms among users of social networking websites such as WhatsApp, Face book, Twitter, Flickr, You Tube, LinkedIn, Pinterest, My Space and a host of other similar sites.

### Social Networking Sites

Social Networking Sites are internet based communication and deals with interactions between people using online mode. These types of interactions are made possible if they have similar interest and information for sharing. SNS permits free flow of communication, leading to new and varied information. Such interactions enable better input of ideas, discussions and relevant contributions to the queries asked in the forum. It permeates beyond structural boundaries and reaches out to build rich data base thus improving networking among the clients. It targets a wide audience from different fields like education, entertainment, business, governmental organization, Non-Governmental Organizations, scientific communities and social groups.

Social Networking has become one of the most important parts of our daily life as it enables us to communicate with a lot of people. Social Networking

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BASIC COMPUTER KNOWLEDGE AND OPERATIONAL SKILLS AMONG  
SECONDARY LEVEL TEACHER TRAINEES IN THE CONTEXT OF  
TECHNO-PEDAGOGY

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### Introduction

Teacher is called as an architect and nation builder who leads their students from the darkness of ignorance to the light of knowledge. The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage (NCTE, 1998). The quality of teachers is a key predictor of students learning (Ololube, 2005). Therefore, teacher education to produce teachers of high quality is of utmost importance. The knowledge of ICT and skills to use ICT in teaching and learning process has gained enormous importance for today's teachers.

Teachers must understand their role in technologically-oriented classrooms. Merely introducing technology to the educational process is not enough but one must ensure technological integration since technology by itself will not lead to change. Rather, it is the way in which teachers integrate technology that has the potential to bring change in the education process. ICTs have qualitatively and quantitatively impacted on teaching, learning and research through teacher education. Teachers need training not only in computer literacy but also in the application of various kinds of educational software to teaching and learning. Thus, in the present era of technology, it becomes essential to every teacher should know the basic computer knowledge, operational skills, pedagogy and subject area content effectively in their daily classroom teaching. Furthermore, there is a need to learn how to integrate ICT's into classroom activities.

### Technology in Education with special reference to Teacher Education

Teacher education institutions may either assume a leadership role in the transformation of education and rapid technological changes. For education to reap the full benefits of ICT's in learning, it is essential that pre-service and in-service teachers have basic ICT skills and competencies. The Secondary Teacher Education Programme gives practice to the prospective teachers.

Information and technology is popularly using in educational field for making teaching learning process successful and interesting for students and



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## OPPORTUNITIES AND CHALLENGES OF TECHNOLOGY MEDIATED MATHEMATICS CLASSROOMS

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### INTRODUCTION

“Strategic use of technology in the teaching and learning of mathematics is the use of digital and physical tools by students and teachers in thoughtfully designed ways and at carefully determined times so that the capabilities of the technology enhance how students and educators learn, experience, communicate, and do mathematics. Technology must be used in this way in all classrooms to support all student’s learning of mathematical concepts and procedures, including those that students eventually employ without the aid of technology. Strategic uses support effective teaching practices and are consistent with research in teaching and learning” (National Council of Teachers of mathematics (NCTM,2011).

Technology has penetrated all spheres of our life today and the field of education is no exception. In fact, the impact of technology and various media on education has been so impressive that the teacher is no longer the sole provider of information. This signifies a paradigm shift in the method of teaching as the teacher is taking over the role of a guide and facilitator in the self-directed, technology-aided learning. The introduction of technological resources into mathematics classroom promises to create opportunities for enhancing student’s learning through active engagement with mathematical ideas. With the evolution of technologies such as cloud, virtual data centres and interactive white boards, there is huge potential for technology to be integrated with the mathematics education.

### NEED AND SIGNIFICANCE OF THE STUDY

Technology can enhance the learning process and make concepts come alive through engaging and interactive media. Use of digital technologies in mathematics education has the capacity to open up diverse pathways for students and teachers to construct and engage with mathematical knowledge, embedding the subject in authentic contexts. It can facilitate an emphasis on practical applications of mathematics, through modelling, visualisation, manipulation and more complex scenario. The new ways of teaching and learning are underpinned by constructivist theories of learning and constitute a shift from a teacher-centred

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## DIGITAL TECHNOLOGIES IN MATHEMATICS EDUCATION

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## Introduction

Education may be defined as a systematic process of determining the extent in which the objectives are achieved by the public. According to Tagor 'Education is that which does not merely give us information but makes our life in harmony with all existence'. The education system is now witnessing a paradigm shift from the traditional chalk-and-board teaching methodology to digitizing the pedagogical approach through technical devices. Digital technologies have been available in school classrooms, especially mathematics classrooms since the introduction of simple four-function calculators in the 1970s. Roger Bacon (1214-1294), an English Franciscan friar, philosopher, scientist and scholar of the 13th century, once stated: 'Neglect of mathematics works injury to all knowledge, since he who is ignorant of it cannot know the other sciences or the things of the world.' Einstein famously said that his pencil was more intelligent than he was - meaning, that he could achieve far more using his pencil as an aid to thinking than he could unaided. There is a need to recognize that digital technologies are the pencils of today. The use of technology is becoming increasingly embedded in a growing number of daily activities. The ability to competently use Information and Communication Technology (ICT), or digital competence, has, in many parts of the world, been identified as an essential 21<sup>st</sup> century competence in its own right. For thousands of years, humans made presentations using only the tools they were born with: their voice and body. That was followed by tools such as chalkboards and projectors, and then by digital tools such as PowerPoint, Video, Audio etc. More recently other tools have emerged, such as Sliderocket, Prezi, Glogster, Animoto, and Magic Magnify. Since the 1980's, the importance of computer support in the teaching and learning of mathematics has been emphasized more and more.

## Need and Significance

Society in 21<sup>st</sup> century is a digital society which is modern, progressive society that is formed as a result of the adoption and integration of Information and Communication Technologies at home, work, education and recreation. Educational systems have been affected greatly by global technological changes and the resulting reform initiatives (Morewood, Ankrum, & Bean, 2010). The best learning environment is first hand experiences. How much we are successful in providing real environment that much depth in learning. The digital platforms make available numerous facilities to achieve this goal. Today's learners from

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## NETIQUETTE AWARENESS AMONG TEACHER TRAINEES OF GRADUATE LEVEL

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### Introduction

'Manners maketh the man', goes the proverb. If make means to create, the proverb is suggesting that humans are definitively created by their manners. Good manners are what distinguish humans from animals. They are, quite literally, what 'make' us human. Good manners can apply to several aspects of human life, including how we speak, the words we use, our tone of voice, our gestures and our actions. They are the finishing touches to a human's personality and behavior. The proverb 'manners maketh man' means that politeness and good manners are essential to humanity. Manners means being polite and cultured. This proverb is thus often used as a way to remind people to be polite. As in the real world, our life on the 'Net' is also guided by definite rules of conduct or etiquette. The word 'etiquette' means 'the forms required by good breeding or prescribed by authority to be required in social or official life.' Etymologically, it comes from the French word for 'ticket.' If you know the etiquette for a particular group or society, you have a ticket for entry into it. As citizens of the 'Net' or 'Netizens' we need to follow 'Netiquette', the etiquette of cyberspace. Netiquette is the code of manners that are supposed to govern online communication. It's an extension of the manners that apply to all human relations, but with a twist: Netiquette governs how people meet each other, greet each other, chat, flirt, fight and do business, all in a medium where the parties to a conversation can't see, hear or shake hands.

### Theoretical Background

Today, more and more people are accessing the Net. The online world is flooded with users of all ages. The online world has become more populated than the real world. But, the unfortunate fact is that most of these users are 'e-illiterate'. They lack proper awareness of the code of conduct in the online world. In cyberspace, no less than in the real world, rudeness is an unfortunate fact of life. Until recently, netiquette was an unwritten code among computer experts, scientists and cyber-pioneers who used early networks. It was simply assumed that the manners of the workaday world extended to the online world, and there

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## TECHNO PEDAGOGICAL CONTENT KNOWLEDGE : AN ARCHITECTURE FOR TEACHER COMPETENCE

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### Introduction

The emergence of new technology has influenced every aspects of human life. Today, a class room without technology is inconceivable. Due to these developments and evolution, standards of learning would be higher in the 21st century than it has been in the 20th century. In order to prepare the students to navigate the 21st century world they must be exposed to technology based instruction in the class room. To be able to survive and be successful in the future school environment, teachers would need to acquire additional knowledge and skills, both general and specific, Teachers play a vital role in realizing the educational goals of a dynamic society. The role of teacher is becoming more specific and specialized and yet demanding a new world order on account of the explosion of knowledge and expansion of skills. This would mean the need for increased professionalism among the incoming teaching community.

Technology can promote effective instruction that is more student-centered, inter-disciplinary, more closely related to real-life events and processes, and adaptive to individual learning styles. Such instruction encourages development of higher order thinking and information-reasoning skills among students, and socially constructed (collaborative) learning, all of which are increasingly required in today's knowledge-based global economy. This potential of technology to improve instruction must be integrated into the design and delivery of teacher professional development programs in the use of technology.

The impact that technology has had on today's schools has been quite significant. This widespread adoption of technology has completely changed how teachers teach and students learn. Teachers are learning how to teach with emerging technologies (tablets, iPads, Smart Boards, digital cameras, computers), while students are using advanced technology to shape how they learn. By embracing and integrating technology in the classroom, we are setting our students up for a successful life outside of school. Here are a few benefits of using it.



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## NEW DOOR TO DIGITAL TRIBES IN DIGITAL WORLD

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## INTRODUCTION

The term tribe or digital tribe is used as a colloquialism for an unofficial community of people who share a common interest, and usually who are loosely affiliated with each other through social media or other Internet mechanisms. The term is related to 'tribe', which traditionally refers to people closely associated in both geography and genealogy. Nowadays, it looks more like a virtual community or a personal network and it is often called global digital tribe. Most anthropologists agree that a tribe is a (small) society that practices its own customs and culture, and that these define the tribe. The tribes are divided into clans, with their own customs and cultural values that differentiate them from activities that occur in 'real life' contexts. People feel more inclined to share and defend their ideas on social platforms.

In the digital world, getting people's attention means creating and accessing communities of interest – also known as digital tribes – that have shared interests over a particular subject or service.

It implies, is the amazing speed with which it took hold in circles broader than the educational circle, and how it became part of our "common sense" without having been tested much in every day practice. The digital native became a rallying cry for change in education, (expensive) technological infusion at all levels of education, and broad-changes in institutions that are providing learning opportunities and environments to these digital natives. This article aims to critically examine the underlying digital native theory, review recent studies inquiring about the existence of digital natives, and to examine the effects that this "movement" has had on the learning professions. Since the term 'digital natives' was popularised by Marc Prensky there has been an on-going discussion and evaluation of the term. The debate around the digital native has progressed over the last twelve years, with some researchers believing that since the natives exist education must change to address this and other investigators taking a more impartial approach and asking if the natives do exist as discussed by Prensky. Research into the latter has identified a body of evidence to suggest there is a difference in use of technologies, not solely based on



**BLENDED LEARNING: A TOOL FOR EFFECTIVE LEARNING**

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**1. INTRODUCTION**

With the advent of new technology the teaching and learning environment is embracing a number of innovations and some of these involve the use of technology through blended learning. In this technological era where new knowledge is being added continuously, there is an urgent need for us to focus on improving their content knowledge and remain updated. Today teaching-learning process takes place through various platforms like online learning, virtual learning, blended learning etc. Such developments are having an influence on the method of teaching and learning in classroom environment. Blended learning forces us to consider the characteristics of digital technology, in general, and information communication technologies (ICTs), more specifically. Blended learning is a noticeable platform which uses technology to combine in-class and out-of-class learning, maximising the educational impact for students as a result.

**2. OBJECTIVES**

The present study is conducted with the following objectives in mind:

- 1 To get an insight of the need and importance of blended learning in education field.
- 2 To understand the main characteristics of blended learning.
- 3 To know the advantages and disadvantages of blended learning.

**3. NEED OF THE STUDY**

Due to rapid growth of Information Technology, our students want to get up-to-date and to get updated as both education and learning is a lifelong and never ending process. Rather than learning through traditional method of teaching and learning, including the use of technology will help learners to gain and acquire new experience in teaching and learning process in education. While focusing on traditional method of teaching and learning, most of the sources of information is available through textbooks, teachers' classrooms etc where teachers and students meet together in a limited space called classroom. Whereas in blended learning, along with traditional method there is a use of technology in teaching

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### ICT RELATED SKILLS OF PROSPECTIVE TEACHERS

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#### Introduction

21st Century is the age of information and communication technology (ICT). Every aspects of life are related to science and technology. Now information and communication technology is popularly using in educational field for making teaching learning process successful and interesting for students and teacher both. Teachers must have the knowledge and skills to use new digital tools and the quality of future teachers depends on the extent of ICT skills they have. In the last 30 years, ICT has emerged as an important topic, in the field of educational research. There are many research studies, showing the importance of ICT in teaching learning process and achieving its outcomes. Numerous research projects have focused on assessing the ICT skills of students and teachers at different levels of education. The present study aimed to investigate the level of distribution of ICT related skills of student teachers at different levels of education.

#### Essential Digital Skills For 21st Century Teachers

Because as computer and associated technologies continue to change and evolve, teachers must continue to strive for excellence in their work. The digital skills that teachers need have long moved on from just being able to use word processing and spreadsheets software. They also should have skills such as Database Skills, Electronic Presentation Skills, Web Navigation Skills, Web Site Design Skills, E-Mail Management Skills, Digital Cameras, Computer Network Knowledge Applicable to your School System, File Management & Windows Explorer Skills, Downloading Software From the Web, Installing Computer Software onto a Computer System, WebCT or Blackboard Teaching Skills, Videoconferencing skills, Scanner Knowledge, Knowledge of PDAs, Deep Web Knowledge, and Computer Security Knowledge (Laura, 2005). Digital skills that 21st Century teachers should have include cloud storage and sharing solutions, social media, web editing, image editing, presentation software, and general multimedia.

#### Need and Significance of the Study

ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters (UNESCO, 2002). ICT is a part of our lives for the last few decades affecting our society as well as individual



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### NETIQUETTE AWARENESS AMONG TEACHER TRAINEES OF GRADUATE LEVEL

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#### Introduction

'Manners maketh the man', goes the proverb. If make means to create, the proverb is suggesting that humans are definitively created by their manners. Good manners are what distinguish humans from animals. They are, quite literally, what 'make' us human. Good manners can apply to several aspects of human life, including how we speak, the words we use, our tone of voice, our gestures and our actions. They are the finishing touches to a human's personality and behavior. The proverb 'manners maketh man' means that politeness and good manners are essential to humanity. Manners means being polite and cultured. This proverb is thus often used as a way to remind people to be polite. As in the real world, our life on the 'Net' is also guided by definite rules of conduct or etiquette. The word 'etiquette' means 'the forms required by good breeding or prescribed by authority to be required in social or official life.' Etymologically, it comes from the French word for 'ticket.' If you know the etiquette for a particular group or society, you have a ticket for entry into it. As citizens of the 'Net' or 'Netizens' we need to follow 'Netiquette', the etiquette of cyberspace. Netiquette is the code of manners that are supposed to govern online communication. It's an extension of the manners that apply to all human relations, but with a twist: Netiquette governs how people meet each other, greet each other, chat, flirt, fight and do business, all in a medium where the parties to a conversation can't see, hear or shake hands.

#### Theoretical Background

Today, more and more people are accessing the Net. The online world is flooded with users of all ages. The online world has become more populated than the real world. But, the unfortunate fact is that most of these users are 'e-illiterate'. They lack proper awareness of the code of conduct in the online world. In cyberspace, no less than in the real world, rudeness is an unfortunate fact of life. Until recently, netiquette was an unwritten code among computer experts, scientists and cyber-pioneers who used early networks. It was simply assumed that the manners of the workaday world extended to the online world, and there



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### ENGLISH LANGUAGE LEARNING THROUGH GAMING

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#### Introduction

Technology plays a vital role in all facets of our lives and we are living in a world that cannot think of even a single day without technological aids. Computer-related technologies bring out rapid changes in the teaching-learning process, making the pedagogy more interactive. By making the teaching more effective, they motivate the students to acquire and construct knowledge. More and more, educators are taking advantage of digital facilities to supplement their classes. Learning can be made enjoyable when our approach to learning is geared towards having fun. Nowadays we can learn through social media, movies or games. On the contrary, education can be quite dull when you follow rote learning methods. There is a need to adopt a twenty-first-century instructional technique that blends thinking, innovation skills, information, media, and ICT literacy. Gaming, in the context of its wide acceptance among the digital natives, can be employed in learning to make it attractive.

Games offer a pleasurable method of learning. The idea of learning no longer means rote memorization. Instead, it means acquiring the skills necessary to be able to respond appropriately in another language, when under pressure in various circumstances (Curry, 2018). Games can deliver these effects in the most entertaining way. We can acquire language and other related skills unconsciously when we delight, playing a game. Games are excellent tools to advance in language competency. In the game based approach, we win games by learning more of our target language. Such games can be played through a handheld game console, applications on our Smartphone, games on the internet, computer games etc.

The objectives of the study may be stated as:

- To analyse the influence of virtual reality and gaming in particular, on students of the digital era
- To explore the possibilities of making learning more interesting and more enjoyable using the features of gaming technologies
- To identify and analyse the apps that offer games to learn a language

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### ICT RELATED SKILLS OF PROSPECTIVE TEACHERS

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#### Introduction

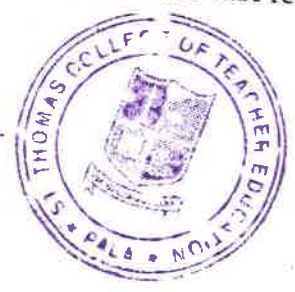
21st Century is the age of information and communication technology (ICT). Every aspects of life are related to science and technology. Now information and communication technology is popularly using in educational field for making teaching learning process successful and interesting for students and teacher both. Teachers must have the knowledge and skills to use new digital tools and the quality of future teachers depends on the extent of ICT skills they have. In the last 30 years, ICT has emerged as an important topic, in the field of educational research. There are many research studies, showing the importance of ICT in teaching learning process and achieving its outcomes. Numerous research projects have focused on assessing the ICT skills of students and teachers at different levels of education. The present study aimed to investigate the level of distribution of ICT related skills of student teachers at different levels of education.

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AWARENESS ON ONLINE COURSES AMONG POST GRADUATE  
STUDENTS: WITH SPECIAL REFERENCE TO MOOC

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Introduction

Distance education has come a long way since its inception, giving rise to modern online education that opens up new possibilities for learning that fits the 21st century. With the aid of online educational technology, everyone around the world can now earn an advanced university degree without interrupting their career. Online education is a type of educational instruction that is delivered via the internet to students using computers. During the last decade, online degrees and courses have become popular alternative for a wide range of non-traditional students, to include those who want to continue working full-time or raising families.. Although there are subtle dissimilarities, the main difference between online and traditional learning is the fact that online education liberates the student from the usual trappings of on-campus degree programs — including driving to school, planning their schedule around classes, and being physically present for each sequence of their coursework.

The 21<sup>st</sup> century witnessed an educational paradigm shift, stemming from the widespread use of Information and Communication Technologies (ICT). With the proliferation of ICT, online, open, and flexible learning moved from the periphery to mainstream education. ICT improved the quality and capacity of the online delivery of educational content. Openness in education has evolved over time and has emerged in different forms (Weller, 2014). Massive Open Online Courses (MOOCs) are a recent development of this open learning movement, which have drawn much attention from both the academic and the public sphere. Online courses are revolutionizing formal education, and have opened a new genre of outreach on cultural and scientific topics. These courses deliver a series of lessons to a web browser or mobile device, to be conveniently accessed anytime, anyplace.

MOOCs are not an independent phenomenon, isolated from other developments in the field of open and distance learning or educational technology. On the contrary, MOOCs are strongly tied to other developments in the field, having the potential to support lifelong learning, eliminate barriers in



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## USAGE OF INTERNET AMONG SECONDARY SCHOOL STUDENTS

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## Introduction

The Internet is a network of communication where information and knowledge about each and every aspect of the world are available and exchanged in an easy and fast manner. It is the greatest collection of human knowledge ever assembled. The internet is the key information and communication technology that led to a worldwide revolutionary change in the information scenario (Siraj, et al., 2015). The internet is a pool of knowledge and any country that fails to provide her youth access to the internet is unseating the country from her throne of dignity among other dignitaries (Olatokun, 2008). It is developed to serve as a platform for various activities for all age groups in society (Akin-Adaeamola, 2014) The Internet is a global computer-based information system composed of many interconnected computer networks. Each network may link tens, hundreds, or even thousands of computers, enabling them to share information and processing power. The Internet has made it possible for people all over the world to communicate with one another effectively and inexpensively. The digital natives (those who born after 2000) are more attached to the facilities provided by internet and are more connected to the digital devices.. The term internet access refers to access by the students to the internet connectivity via personal computers, laptops, tablets, or smartphones in such a way that the student is able to obtain information from the internet.

It is well informed on the literature that Information and Communication Technologies (ICTs) used to acquire knowledge have had a significant effect on the development of human beings during the second half of the twentieth century. The term internet access refers to access by the students to the internet connectivity via personal computers, laptops, tablets, or smartphones in such a way that the student is able to obtain information from the internet.

## Digital natives

The term digital natives are those who grow-up in the digital-age, native speakers of the digital language of computers, video games and Internet". The term was used as early as 1996 as part of the Declaration of the Independence of Cyberspace. They were popularized by education consultant Marc Prensky in his

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## EMERGENCE OF DIGITAL INITIATIVES IN BOTANY

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### INTRODUCTION

Digital initiative is the foundation that underpins the future state of an organisation, subject or anything when it attains digital maturity. It helps with guidance and digital services including digitization of materials, archival storage of electronic files, data management, digital exhibit, services and other activities needed. Digital Initiatives helps to develop and design innovative application to enhance teaching, learning and research: provides mobile and web application in design and development service. President Pranab Mukherjee on the occasion of Guru Poornima launched four major digital initiatives to push e-education. They are SWAYAM, SwayamPrabha, National Academic Depository and National Digital Library. All these digital initiatives are operational under Union Ministry of Human Resource and Development. The prime aim of all these digital initiatives is to bridge the digital divide for student in e-education. All these can be accessed by anyone anywhere at any time.

Botany also called as Plant Science is a branch of Biology which deals with plant life. As technology grows its implications can be seen in almost all disciplines. Thus it helps for the digitization of data which help for its easy accessibility by anyone anywhere in the world at any time when needed. Digitization also helps for frequent updating of new knowledge to existing one and it can be retained for many years without any quality loss when compared to books. The expense for digitisation of data is comparatively low. Now a days the application of technology can be seen in various fields of Botany.

### OBJECTIVE:

To find out the advancement of digital initiatives in the field of Botany, their applications, usability to satisfy social needs.

### FORMS OF DIGITAL INITIATIVES

- Digital Herbaria:



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**MASS MEDIA AND LIFESTYLE DISEASES IN TEENAGERS**

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**Introduction**

The media plays a significant role in influencing perceptions, opinions and knowledge about our society. It is one of the most powerful tools of communication in every country. It can be an aid to respond our views to society. Media helps to provide equal opportunity to every individual. Now media is presented as a greatest weapon to communicate our knowledge, information, etc. The world is making a steady progress towards a better future every day. No one can deny the blessings of media in today's world. The mass media helps people to remain informed and updated about the various news, events, social activities, lifestyle, entertainment, and advertisements irrespective of the geographical barriers.

The mass media denotes collectively to all media which are used for mass communication, and to the administrations which control these technologies. In 1950s, the countries which have reached a high level of progress, the mass media consisting of film, radio and TV has a crucial role in political power. The mass media plays a momentous role in molding public perceptions on many important issues through information and knowledge. It also plays an important role in shaping modern culture. The mass media consists of the internet, television, newspapers and radio. The Internet is significantly more influential than any other media. It is nearly twice as influential as TV and eight times more influential than traditional print media. The mass media is good for socializing and important in reporting people essential information and news, but it very often wastes people time and distracts their attention.

The mass media has a vast influence on people of all ages but teenagers are exposed to mass media more than any other adults are. Teenagers are not interested in real life experience and leisure activities, they turn to social networks which are more available and cheaper than other ways for searching companionships. "The media's the most powerful entity on earth. They have the power to make the innocent guilty and to make the guilty innocent, and that's power. Because they control the minds of the masses. The press is so powerful in its image-making role, it can make the criminal look like he's the victim and make the victim look like he's the criminal. This is the press, an irresponsible press. It will make the criminal look like he's the victim and make the victim look like he's the criminal. If you aren't careful, the newspapers will have you hating

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## DIGITALIZATION OF INDIAN HIGHER EDUCATION: IN SEARCH OF NEW METHODS OF TEACHING AND LEARNING

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### Introduction

It is a good omen that Indian higher education is going digital. In recent years, Indian higher education is increasingly thinking about digitalizing the higher education. Introduction of MOOC in the field of higher educational institutions for the development of teachers and students is one of the hopeful steps in this regard. No doubt that digitalization has helped to connect and transfer the education system faster and efficient at a lower cost. Of course, there are many challenges in the smooth use of digital methods in the teaching and learning process. The success and failure of higher education in India is totally depended upon our effective answers to these challenges.

### Need of Digitalization of Higher Education

The method of teaching in higher education have changed in the last 15 years. Though there are, in many classrooms, still the teachers practice the 'chalk and talk' technology, the influence and practice of digital media is an unavoidable and essential part in the teaching and learning practices. It is because of the learning styles of the students have drastically changed from mere reading of the books and taking notes from the teachers to the digital methods. Present education system is learner-centred and the learners are a type of 'screenagers'. In this scenario, we have to think about the need of digitization and digitalization in the higher education. Firstly it is necessary to know the forces that changed the higher education. These forces change from ICT, learner-centric learning to the students belonging to a 'net generation'. Some of the forces are the following:

- Students and Technology- the ever changing demographics and the shifting expectations for the learning environment have forced our higher education system to re-plan and re-examine the traditional and conventional teaching-learning practices and come out with new pedagogical methods which are technologically advanced and fulfils the learning styles of the net-generation students.
- Economy- one of the reasons to adopt ICT facilitated teaching and learning practices in the higher education scenario is its cost effectiveness. The

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## A STUDY ON ROLE OF MEDIA ON HEDONIC SHOPPING AMONG UNDERGRADUATE GIRLS

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### Introduction

Today, changes within the structure of a dynamic market and competition influences purchasing preferences and behavior of customers. Consumers realize their purchasing behavior and preferences not only based on their life styles, but also according to hedonic and utilitarian characteristics of products. The consumption fact of today differs from traditional consumption perceptions. This difference is caused by the fact that the act of consumption is not only based on utilitarian but also hedonic instincts (Westbrook and Black, 1985; Batra and Ahtola, 1990; Babin et al., 1994). Shopping is an activity in which a consumer browses the available goods presented by more retailers with the intent to purchase a suitable section of them. It may be considered a leisure activity as well as an economic one. Through which searching, selecting and ultimately purchasing services that fulfills the needs, wants and desires of customers. It involves acquiring the goods at right quality, at right quantity, at right time from a right source and at a right price.

The shopping experience can range from pleasing to terrible, that would be based on a variety of factors including how the customer is treated, convenience, the type of goods being purchased and mood of the customers. In hedonic oriented consumers derive satisfaction from the shopping activity itself on the other hand the task oriented consumer engages in shopping out of necessity. Both the consumer has his/ her own perception and will admit that each shopping area has its own characteristics and qualities. The shopping may be for home shopping, party shopping, social shopping, item shopping, recreational shopping etc. here the researcher only focused on hedonic shopping. Hedonism, in a word, is the view that "pleasure is the good." In its most comprehensive form, hedonism about value holds that the only thing that ultimately ever makes the world, or a life, better is its containing more pleasure or less pain. Consumers who act with hedonic purchasing reasons realize the act not to satisfy a need but to enjoy and take pleasure by doing it without contemplating and planning.



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## BIOLOGICAL DATABASE- A DIGITAL INITIATIVE IN BIOINFORMATICS

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### INTRODUCTION

New developments in biology resulted in the generation of enormous amounts of biological data. The amount and diversity of data generated from various advancing biological research technologies accentuated the need for storing and communicating large datasets in a meaningful manner. The challenges imposed on data modelling by inherent properties of biological data and the concept of 'Electronic data publishing' introduced in early 1990s, brought out a digital transformation of data repositories to computer based biological database. Biological Databases domain has grown rapidly in terms of information content, implementation and integration. The issues, challenges and new possibilities created by the biological databases has been dealt with a new branch of science called Bioinformatics.

The National Centre for Biotechnology Information defines bioinformatics as: "Bioinformatics is the field of science in which biology, computer science, and information technology merge into a single discipline. There are three important sub-disciplines within bioinformatics: the development of new algorithms and statistics which assess relationships among members of large data sets, the analysis and interpretation of various types of data including nucleotide and amino acid sequences, protein domains, and protein structures; and the development and implementation of tools that enable efficient access and management of different types of information. Relational database concepts of computer science and information retrieval concepts of digital libraries are important for understanding biological databases. Biological database design, development, and long-term management are one of the major digital initiatives in bioinformatics.

A biological database is a collection of data that is organized so that its contents can easily be accessed, managed and updated. They have been emerged to handle the large amount of molecular biological data. It is a significant digital initiative which helps to store, organize and analyse the huge amount of biological data



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## TECHNO PEDAGOGICAL CONTENT KNOWLEDGE: AN ARCHITECTURE FOR TEACHER COMPETENCE

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### Introduction

The emergence of new technology has influenced every aspects of human life. Today, a class room without technology is inconceivable. Due to these developments and evolution, standards of learning would be higher in the 21st century than it has been in the 20th century. In order to prepare the students to navigate the 21st century world they must be exposed to technology based instruction in the class room. To be able to survive and be successful in the future school environment, teachers would need to acquire additional knowledge and skills, both general and specific, Teachers play a vital role in realizing the educational goals of a dynamic society. The role of teacher is becoming more specific and specialized and yet demanding a new world order on account of the explosion of knowledge and expansion of skills. This would mean the need for increased professionalism among the incoming teaching community.

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The impact that technology has had on today's schools has been quite significant. This widespread adoption of technology has completely changed how teachers teach and students learn. Teachers are learning how to teach with emerging technologies (tablets, iPads, Smart Boards, digital cameras, computers), while students are using advanced technology to shape how they learn. By embracing and integrating technology in the classroom, we are setting our students up for a successful life outside of school. Here are a few benefits of using it.



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## ONLINE COURSES FOR EDUCATION: A BREAKTHROUGH IN THE DIGITAL AGE

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### Introduction

A good educational model is the need of the hour to ensure that the students developed as enlightened citizens and also participate in national development missions. According to Dr. A P. J. Abdul Kalam, 'when the students come out of the educational institutions certain capacities are required to be built in them to deal with the real world, particularly to grow in their professional career and participate in the national development'. Online courses are revolutionizing formal education, and have opened a new genre of outreach on cultural and scientific topics. These courses deliver a series of lessons to a web browser or mobile device, to be conveniently accessed anytime, anyplace. It's a directed learning process, comprised of educational information (articles, videos, images, and web links), communication (messaging, discussion forums) and some way to measure students' achievements.

Even though the technology of online education is relatively new, the concept is over 170 years old and has its origins in a correspondence course offered in Great Britain where the instructor sent lessons and received students' completed assignments by mail. Later Distance learning technology was developed and at present online learning courses are modified forms of Distant Education. According to Moor & Kearsley (2012), "Distance education is teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organization" (p. 2). The technological innovations began with radio, television, teleconferences and finally the Internet, the unavoidable part of present scenario.

With the advent of radio in the early 20<sup>th</sup> century, distance education was transformed, with students learning in a purely aural format. However the era of distance learning in the radio was plagued by a lack of professionalism from instructors. Later by the advent of television, students were able to obtain a well-rounded education. The establishment of British Open University in 1969 is cited as a watershed moment in the development of distance education. It offered a

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# TECHNOLOGY INTEGRATION IN EDUCATION: STUDY ON DIGITAL NATIVE PRE-SERVICE TEACHERS

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## Introduction

Digital Native is the term used to describe the generation which was identified to be acquainted and used with technology from their childhood onwards. From the introduction of Personal Computer (PC), the technology advancement took a fast phase for the recent years. With the invention of mobile phones the scope of potential opportunities in technology has widened to various forms such as digital watches, E-Wallet and even to online exams in education Sector. The term digital natives was first introduced by education consultant Marc Prensky (2001) in his article entitled 'Digital Natives, Digital Immigrants', in which he relates the contemporary decline in American education to educators' failure to understand the needs of modern students. Contrary to the Net Gen pre-service teachers, the digital natives actively participate in the creative cyberspace revolution. They break down the old hierarchies and exploit new hierarchies as shapers of the new digital culture. Even school students have made various applications and attained world recognition on their inventions. But the majority of the young generation uses technology for the social networking websites and the intention of present study is to estimate the technology requirements of students in education and also to assess the knowledge level of pre service teachers as a digital native.

## Need and Significance of the Study

Digital literacy is a component of media literacy. It refers to an individual's ability to find, evaluate, produce and communicate clear information through writing and other forms of communication on various digital platforms. Digital literacy showcases an individual's grammar, computer, writing, and typing skills on platforms, such as social media and blog sites. Digital Literacy also includes other devices, such as, smart phones, tablets, laptops and desktop PCs. While digital literacy initially focused on digital skills and stand-alone computers, its focus has shifted to network devices including the Internet and use of social media. Digital literacy does not replace traditional forms of literacy, instead building upon the skills that form the foundation of traditional forms of literacy.

Today's young generation use the potential of digital media in exploring, connecting, creating, and learning. Microsoft says digital literacy helps learners



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**BLENDED LEARNING: ROLE OF THE TEACHER**

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Blended learning is an innovative concept that embraces the advantages of both traditional teaching in the classroom and ICT supported learning including both offline learning and online learning. It has scope for collaborative learning; constructive learning and computer assisted learning (CAI). Blended learning needs rigorous efforts, right attitude, handsome budget and highly motivated teachers and students for its successful implementation. The educational system at present is in a transition stage. To meet the challenges of expansion and for catering individuals need it is trying to adopt new technologies and exploring new paths to reach the goal of quality educational opportunities for all, at the same time due to various factors like deficient budgets, lack of facilities, advantages of face to face interaction, it is not completely ready to leave the traditional modes of knowledge transfer. As part of learning is done through ICT, online or offline mode so teachers and students get more time in the classroom for creative and cooperative exercise. Students gain advantage of online learning and CAI without losing social interaction element and human touch of traditional teaching.

**Need and Significance**

Blended learning refers to the use of technology to complement classroom sessions and strengthen the teaching/training process through practice and the application of concepts learned in the classroom. And in the realms of eLearning, blended learning is the complementary use of e-learning in the standard educational model. In the traditional model, the teacher is the provider of knowledge. Blended Learning, on the other hand, positions the student as an active pursuer of knowledge. So while students will spend more time learning at computers, they still need a great deal of guidance in learning how to learn. This study helps us to know about blended learning. We also discuss the advantages and disadvantages of blended learning. It helps us to know about the role of teacher in blended learning. Blended Learning can help you achieve some benefits. We also discuss the role of student in the blended classroom environment.

**Objectives**

1. To develop a good knowledge about blended learning.



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## THE FLIPPED CLASSROOM: A MODEL FOR ACTIVE STUDENT LEARNING

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### Introduction

In the era of technology, computer and internet teaching methods should be changed accordingly. It doesn't mean that traditional methods should be completely avoided, but we need to integrate the traditional methods and new technology to achieve better in classroom (Pathare, N. 2018). One of the major challenges for teachers all over the world is the gaining and sustaining of students interest and attention in the classrooms. It takes a good teacher with adequate preparation and mastery of skills to achieve this objective. But, even these teachers sometimes find it difficult to be successful in this regard with the conventional teaching methods, strategies and approaches. Thus, the focus should be on developing and using approaches and methods which utilize the allotted classroom time effectively and make learning meaningful and effectively. (P, Najmuddeen & Santhosh. 2017).

A flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom. In a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home while engaging in concepts in the classroom with the guidance of a mentor. (Plunkett, K. 2014). In the traditional model of classroom instruction, the teacher is typically the central focus of a lesson and the primary disseminator of information during the class period. The teacher responds to questions while students defer directly to the teacher for guidance and feedback.

The flipped classroom intentionally shifts instruction to a learner-centred model in which class time explores topics in greater depth and creates meaningful learning opportunities, while educational technologies such as online videos are used to 'deliver content' outside of the classroom. In a flipped classroom, 'content delivery' may take a variety of forms. Often, video lessons prepared by the teacher

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### SWAYAM- A WAY OF LEARNING

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#### Introduction

The format of conventional education has clearly not kept pace with the pace of advancement in today's modern society. The old-fashioned teaching methods, which have changed little during the last century, have helped maintain the myth that a normal "education" that ends at nearly age 22 prepares a person for a lifetime of the output in skill in which they have majored .

Today, the volatile growth in technology renders nearly obsolete those skills which may have been on the cutting edge just a few years before. Therefore, it is required that one keeps studying/ learning throughout by himself to keep up with the pace. Self-Study is defined as something studied by oneself without any kind of help or supervision of a teacher or a professor, although; the person studying can refer to some external sources like books, tutorials, and encyclopedia, etc. Therefore, it won't be wrong to say that it is a kind of study where the student himself is responsible to a large extent for his own instruction and is himself his trainer or teacher. There is no one to tell him or guide him to do something. This may also be defined as "learning on your own" or "by yourself" or being your own teacher

Under SWAYAM or Study Webs of active-learning for young aspiring minds programme of Ministry of Human Resource Development , Government of India , professors and faculties of centrally founded institutions like IITs , IIMs , central universities will offer online courses to citizens of India.

#### Need and significance

SWAYAM is an instrument for self-actualisation providing opportunities for life long learning . Here learner can choose from hundreds of courses , virtually every course that is taught at the university /college / school level and these shall be offered by best of the teachers in India and elsewhere . If a student is studying in any college , he/she can transfer the credits earned by taking these courses into their academic record . If you are , working or not working , in school or out of school , SWAYAM presents a unique educational opportunity to expand the horizons of knowledge .



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## GOOGLE LEARNING APPS: AN INTERVENTION FOR EASY LEARNING

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### Introduction

Technology has the ability to enhance relationships between teachers and students. When teachers effectively integrate technology into subject areas, teachers grow into roles of adviser, content expert, and coach. Technology helps make teaching and learning more meaningful and fun. By incorporating various kinds of technology in our classroom, we can save time for our self and our students, and we can create a better communication system between students, teachers, and parents. (Chauhan S.S, 1992) Effective communication is a key component of an engaged and successful class. Google Apps is a core suite of communication and collaboration applications that allow students to work from any device on documents and projects. Once a school registered email address is registered with Google Apps for Education, teachers and students can unlock Google's apps with one login. (Chakravarthi M, 2005)

Getting Google Apps accounts for our school is an increasingly attractive proposition. This free, online suite of tools offers schools the chance to centralize all their academic efforts under one school-managed online domain. It is highly interactive, and positively encourages collaboration. It has benefits for both staff and students and is instantly familiar and easy to learn.

### Need and Significance

There was time when teachers were the guardians of knowledge. After the invent of the internet the teachers act more like learning facilitators and point their learners in the right direction. Since the internet technology is so advanced, we have to utilize its opportunities in a complete way. So, it's relevance to find out how effectively Google learning apps can be used for better teaching - learning process.

The advancement of internet technology has greatly influenced the way of people learn. Google learning apps provide a platform that provide learners the flexibility to learn from anywhere at any time. Every relevant information is easily available in internet. It provide ample opportunities for learners, because they can



**DIGITAL COMPETENCE AMONG SECONDARY LEVEL TEACHER  
TRAINEES**

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Scholar, M.G. University, Kottayam**Introduction**

Information and Communication Technology has been the most useful in modern times which helps us not only in our daily lives but also our personal and professional developments. Digital technology and its applications are connected with everyday life in different ways such as schooling to higher education, to social engagement and even commercial and health management. Students and faculty are widely using the internet for educational purposes to gather information for their research and for accumulating the knowledge of existing subject they have. Digital competence is the most recent concept describing technology-related skills. During the contemporary years, several terms have been used to describe the skills and competence of using digital technologies, such as ICT skills, technology skills, information technology skills, 21st century skills, information literacy, digital literacy, and Digital Competence. These are part and piece of higher education and an important part of life for students especially for student teachers. Learning these key aspects of the 21<sup>st</sup> century technology that surrounds us can only benefit students in their pursuit of knowledge.

**Statement of the Problem**

The present study is entitled as "Digital Competence among Secondary Level Teacher Trainees".

**Variables of the Study****Digital Competence**

Digital Competence consists of the ability to access and use digital media and ICT, to understand and critically evaluate different aspects of digital media and media contents and to communicate effectively in a variety of contexts.

**Streams of Discipline**

The Streams of Discipline included in the Study is:

- Science
- Humanities
- Commerce



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## FLIPPED CLASSROOM IN THE PRESENT EDUCATION SYSTEM

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### Introduction

Flipped learning is a methodology that helps teachers to prioritize active learning during class time by assigning students lecture materials and presentations to be viewed at home or outside of class. One of the most exciting advancements in the modern classroom is flipped learning. It hinges on the idea that students learn more effectively by using class time for small group activities and individual attention. Teachers then assign students lecture materials and presentations to be viewed at home or outside of the classroom day, prioritizing active learning.

### Need and Significance

The classical setting of a classroom is all about the teacher and the teacher's needs. All the tools are the teacher's to use, for the best delivery of instruction. The students are merely passive receivers of information. But whoever entered a classroom knows that students are anything but passive. Their natural curiosity makes them actively seek new knowledge, and when they're passionate about a subject they try to learn all there is to be learned about it.

A student-centred approach to teaching shifts the focus from the teacher's needs to the student's. And this is what the flipped classroom model supports:

- When students watch or listen to lectures at home, and then solve problems and apply the new knowledge in the classroom, they get less frustration with their homework.
- When they don't understand a new concept, they can ask questions and get immediate targeted answers.
- The time spent in the classroom becomes not enough for all the conversations and collaboration that inevitably spur from exploring subjects in a deeper manner.
- Last but not least, students who are absent, due to illness, too long a commute, or any other reason, can catch up with their peers faster and easier with the flipped classroom model than with the standard one.

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## VIRTUAL CLASSROOM: EDUCATION IN TECHNOLOGICAL ERA

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## Introduction

Dramatic revolutions in technology have given rise to a worldwide explosion of information. The explosion of the knowledge age, technological advancement has increased dramatically in every sphere including mainstream education. These advances made changes in the traditional classroom concept and have named as "virtual education", "virtual classroom", "virtual Universities", "on line Courses", "electronic" and "cyberspace institution" etc. Many educational institutions have been identified the need of addressing the changes in the technological world. They are driven by the goal to introduce modern innovations in the technology to the traditional classroom situations. This step will increase enrolment, learner participation in education and will award a vast range of degrees through massive investments in distance education programmes.

Our society is changing. A new paradigm of education is developing, one that integrates the technology of computers and the Internet in education. The use of computers, and especially the internet, opens a new world of potential. With the use of technology, education can surpass the physical boundaries of the classroom and provide students the opportunity to experience more. The use of the technological tools in education is a topic that has received extensive attention. There are some obvious advantages when compared to traditional in-class education.

The growing popularity of e-learning has introduced a new term to education, as virtual classroom where students will be present with his instructor and fellow learners in a classroom. They will not present physically in the classroom but connected to the classroom via internet. Virtual classroom aims to simulate the experience of attending class over the web, so everyone is able to see other participant virtually. A virtual classroom system integrates the benefits of a physical classroom with the convenience of a virtual learning environment. It allows the tutor and students to participate in real time lessons and discussions. Students can ask questions, drawn on the whiteboard,



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TECHNOLOGY MEDIATED CLASSROOM TO ENRICH LEARNING  
MATHEMATICS

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## Introduction

Across the world technology is the part of social and academic lives of the students. Throughout the history of human communication, advances in technology have powered paradigmatic shifts in education (Frick, 1991). In technology mediated classroom communication there is a sender, a receiver, message (content) and technology. If this message is delivered through any type of technology only then technology mediated communication occurs in classroom setting. Any communication pattern mediated through the technology like computers, Internet, audio video equipment, educational satellites and mobiles etc. are facilitating the interactive teaching - learning process in classroom. The active environment of classroom provided by the technology with access to local, national, and international networks increases interaction and communication among students, their teachers, peers, parents, and other members of the community.

## Need and Significance

Learning Mathematics is as much about doing as it about knows. How knowing and doing come together is evident in the mathematical practices of the classroom. Technology can change the nature of school mathematics by engaging students in more active mathematical practices such as experimenting, investigating and problem solving that bring depth to their learning and encourage them to ask questions rather than only looking for answers (Farrell, 1996; Makar & Confrey, 2006). Olive and Makar (2010) argue that mathematical knowledge and mathematical practices are inextricably linked, and that this connection can be strengthened by the use of technologies.

Technology is a servant if used by students or teachers only as a fast, reliable replacement for pen and paper calculations without changing the nature of classroom activities. Technology is a partner when it provides access to new kinds of tasks or new ways of approaching existing tasks to develop

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**MOBILE LEARNING APPS: A BENEFICIARY TOOL FOR TEACHING -  
LEARNING PROCESS**

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Education is a process by which the wisdom, knowledge and skills of the one generation is passed on to the next. A dynamic process has been taken place in the present era. Education came to the finger tips. Quality education for our children is no longer a dream. It's affordable. The impact of new technology that is growing rapidly at present is affecting many sectors, including the field of education. ICT provides an interesting learning environment, the virtual classroom that allows users to participate in the learning process without travelling and let people interact from different places. The tools used are numberless; they range from video-conferencing, internet with hypertexts, interactive learning objects, audiovisual materials, forums, instant messaging, blogs, whiteboards, wikis, i-pod, etc.

As the result of technological development, even average families can afford a mobile phone in which applications can be downloaded. Educational apps are making things easier for children to understand. Books are often found to be tiring and boring for children while replacing them with colorful pages and moving animations can make learning fun to the core. Mobile learning apps can help learners keep tracks of their studies through automated updated and the means to check on assignments and their own progress (Lawson, J. 2017).

Mobile learning apps provide an informal or opportunist, as well as private, situational and unstructured learning opportunities. It offers modern ways to support instruction through mobile devices. The term learning from mobile implies the use of mobiles devices as tool to deliver learning materials specially designed to this purpose. The learning with mobile indicates the use of mobile devices as tool/cognitive tool to promote higher order thinking skills.

**Need and Significance**

There was a time when teachers were the guardians of knowledge. After the invent of internet the teachers act more like learning facilitators and point


  
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## BLENDED LEARNING A NEW APPROACH IN EDUCATION

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### Introduction

Blended learning is a term concerned with transmitting knowledge. Blended learning is "the learning that is facilitated by the effective combination of different modes of delivery, models of teaching and styles of learning, and founded on transparent communication amongst all parties involved with a course" (Ayala, J. 2009). Blended learning is also used interchangeably as hybrid learning or mixed learning in academic theories. However, all of these concepts broadly refer to the integration "blending" of e-learning tools and techniques. Blended learning generally has many advantages over traditional way of learning and transmitting knowledge (Face-to-Face); the cost effectiveness is one of the most advocated advantages for both the accrediting learning institution and the students. This advantage will improve the education process. Flexibility and time management of blended learning is perceived as another main advantage of the blended learning. On the other hand, some of the severe limitations of the blended learning will be also considered before initiating such type of learning method. These considerations are various in natures but controlled such as computer and internet access, limited knowledge in the use of technology, and study skills.

### Need and significance

Learning computer code is hard issue of new pupils. So we can say that computer programming is the most substantial and crucial issue in computer science. As we overcome this problem, we use various methods that named blended learning which is used to new technologic ways and independence old methods in instructions. Blended learning is important because it breaks down the traditional walks of teaching, ones that doesn't work for all students and now with access to present day technologies and resources we can tailor the learning experiences for each students. Blended learning offers flexible time frames that can be personalised to each person, offering them the ability to learn at their own pace.

### Objectives

- To develop consciousness of blended learning.



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## TEACHING AND LEARNING TOWARDS DIGITAL LITERACY

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## Introduction

Digital literacy is a component of media literacy. It refers to an individual's ability to find, evaluate, produce and communicate clear information through writing and other forms of communication on various digital platforms. Digital literacy showcases an individual's grammar, computer, writing, and typing skills on platforms, such as social media and blog sites. Digital Literacy also includes other devices, such as, smartphones, tablets, laptops and desktop PCs.

While digital literacy initially focused on digital skills and stand-alone computers, its focus has shifted to network devices including the Internet and use of social media. Digital literacy does not replace traditional forms of literacy, instead building upon the skills that form the foundation of traditional forms of literacy. People use digital media for a range of activities: exploring, connecting, creating, and learning.

Microsoft says digital literacy helps learners develop an essential understanding of sophisticated equipment like personal computers. Courses help them to use technology in complementing their daily routine and become more productive. Technology proficiency includes social, ethical, and insightful practices inherent in education, work, leisure, and everyday routine. The International Society for Technology in Education maintains parameters for digital literacy around six benchmarks. These consist of "innovation, communication and cooperation, research and information, critical thinking, problem-solving and decision-making, digital citizenship, and technology concepts and operations."

## NEED AND SIGNIFICANCE

Digital literacy needs for teaching and learning because to avoid all the unwanted mistakes and to solve all the problems we are facing day to day teaching and learning process. Many teachers are inefficient in the teaching field. So the teaching and the learning process can't be standardised by the



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## DIGITAL LITERACY: A VITAL COMPETENCY FOR 21<sup>ST</sup> CENTURY TEACHERS

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### Introduction

Every educator is familiar with the concept of literacy - the ability to read and write. A person who is illiterate, who cannot read or write, will inevitably struggle to get along in society. It is impossible to go on to higher education or get a high-paying job without the ability to read and write. Even daily tasks, like reading a newspaper or filling out job applications, are difficult for an illiterate person. In today's world, literacy goes beyond just the basic ability to comprehend text. Today's students will also need to master a new skill - digital literacy. Cornell University External link (2009) defines digital literacy as "the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet."

Digital literacy, by this definition, encompasses a wide range of skills, all of which are necessary to succeed in an increasingly digital world. As print mediums begin to die out, the ability to comprehend information found online becomes more and more important. Students who lack digital literacy skills may soon find themselves at just as much of a disadvantage as those who cannot read or write. Because digital literacy is so important, educators are increasingly required to teach students digital literacy in the classroom. In many ways, this is similar to what educators have always done in teaching students to read and write. In other ways, however, digital literacy is a brand new skill.

One of the most important components of digital literacy is the ability to not just find, but also to evaluate, information. This means finding the answer to a question or a bit of needed information and then judging whether the source is reliable (Tyner, 1998). Educators can, and should, teach students how to tell whether information on the internet is true. The ability to weed out false information and find reliable sources is a key part of digital literacy and a crucial life skill in the 21st century.

The meaning of 'digital literacy' has shifted over the years. While there was a time when job candidates were encouraged to list 'Proficient at Microsoft Word' on their resume, now such skills are considered standard. This shift toward a technologically savvy workforce has permeated the classroom as well. It



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## DIGITAL INITIATIVES FOR SUCCESSFUL INDIA

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## Introduction

Digital India is a large umbrella national programme that focuses at providing universal digital literacy and universal accessibility of all digital resources for citizens. The vision is centered on three key areas creation of digital infrastructure, delivery of governance and services on demand, and digital empowerment of citizens. The programme will also ensure that all government services and information are available anywhere, anytime, on any device that is easy-to-use, seamless, highly-available and secured. It is one of the steps by the government to motivate and connect Indian economy to a knowledge savvy world. The digital world that we live in today is that where every civilian has a bright prospect to transform the lives in many ways that were hard to envision just a couple of years ago. The 'Digital India' programme, as an initiative of honorable prime Minister Mr. Narendra Modi, will emerge new progressions in every sector and generates innovative endeavors for next. The motive beyond the concept is to build a participative, transparent and responsive system. All educational institutions and government services will soon be able to provide 24x7 round the clock. Digital India will provide all services electronically and promote digital literacy. Digital Technologies which includes the concept of cloud computing and mobile applications have emerged as the catalysts for express economic growth and citizen empowerment.

Companies all over the world desire to invest in digital India -the 21st century India, as a growth opportunity. Hence, an attempt has been made in this paper to understand Digital India -as a campaign where technologies and connectivity will come together to make an impact on all aspects of governance and improve the quality of life of citizens. Global investors like Sundar Pichai, Satya Nadella, Elon Musk have supported Modi's Digital India Initiative.

The "Digital India" Initiative aims at availing digitizing of various individual projects of all central government and ministries like education, health services and other services, that can be delivered to citizens using information and communication Technology (ICT) by joining all the areas of India including the



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## RELEVANCE AND IMPLEMENTATION OF BLENDED LEARNING IN INDIAN EDUCATION SYSTEM

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### Introduction

The internet has become an integral part of every individual's life. ICT, or Information and Communication Technology, has given wings to scholars, educators, and allied staff in a multitude of ways. Software in schools has empowered them to uplift their communities through the use of technology related activities in the world of education. But there still remains a negative image of management software in the minds of many people. The education has vital role in building the society. Education determines standard of society. The quality education helps to empowering the nation in all aspects by providing new thoughts, the ways of implementation of various technologies and so many such things. The quality education is basic need of the society. There are number of effective teaching & learning methodologies in practice.

Technology is the most effective way to increase the student's knowledge. Here comes the role of ICT in the education sector! Being an academician I cannot imagine education without ICT. Nowadays ICT (specially an internet) plays imminent role in the process of integrating technology into the educational activities. The educational system at present is in a transition stage. To meet the challenges of expansion and for catering individuals need, it is trying to adopt new technologies and exploring new paths to reach the goal of quality educational opportunities for all. At the same time due to various factors like deficient budgets, lack of facilities, advantages of face to face interaction, it is not completely ready to leave the traditional modes of knowledge transfer. Even the students are in a state of dual mind. When a group of teacher trainees were inquired about the mode of teaching they will prefer from tradition classroom teaching and ICT supported teaching the students were nearly evenly divided between both the choices.

To make knowledge correlate with the present technological advancement and globalization, to minimize the teaching errors, to improve the quality, to increase students exposure ICT supported teaching learning process is a good option. ICT supported teaching provides new dimension to teaching



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## DIGITAL LITERACY IN SCHOOL : ROLE OF TEACHER

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Pala, Kerala*Cyber bullying*

Digital Literacy is the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers. The term has evolved as technologies have provided ever increasing capabilities for the organisations, individuals and society in general. It now incorporates elements derived from other terms such as ICT literacy (the ability to use digital technologies), information literacy (recognising when information is needed, and the ability to locate, evaluate and effectively use it) and media literacy (the ability to access, evaluate and create media) amongst others. It is now used to describe anything and everything related to technology or computers.

Digital literacy is a component of media literacy. It refers to an individual's ability to find, evaluate, produce and communicate clear information through writing and other forms of communication on various digital platforms. Digital literacy showcases an individual's grammar, computer, writing, and typing skills on platforms, such as social media and blog sites. Digital Literacy also includes other devices, such as, smartphones, tablets, laptops and desktop PCs. Schools are continuously updating their curricula to keep up with accelerating technological developments. This often includes computers in the classroom, the use of educational software to teach curricula, and course materials being made available to students online. Students are often taught literacy skills such as how to verify credible sources online, cite web sites, and prevent plagiarism in a technological world. Google and Wikipedia are frequently used by students for everyday life research and are just two common tools that facilitate modern education. Digital technology has impacted the way material is taught in the classroom. With the use of technology rising over the past decade, educators are enhancing traditional forms of learning with digital literacy through different platforms.

**Need and Significance**

The Digital world holds tremendous promise for children. Going online can offer access to boundless beneficial information, facilitate new ways of



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## ROLE OF VIRTUAL CLASSROOMS IN THE 21<sup>ST</sup> CENTURY

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### Introduction

Education is the manifestation of the perfection already in man Swami Vivekananda. (3 March 1894). Manifestation of education in 21st century is possible with the use of ICT (Information and Communication Technology) and use of multimedia which accelerated the education sector. The curriculum and content should be developed on the basis of present day needs of society. ICT can provide opportunities for improving various existing approaches to content development and improve the quality of education. It also improves the quality and efficiency of teaching learning process.

A virtual classroom is an online classroom that allows participants to communicate with one another, view presentations or videos, interact with other participants, and engage with resources in work groups. Virtual means a simulation of the real thing, Virtual Classroom is a simulated classroom via internet. It allows the learners to attend a class from anywhere in the world. Virtual Education is a learning environment where the teacher and the students are separated by time and space or both. They communicate via Multimedia, Internet and Videoconferencing. Virtual Education in our country(India) is "provision of ubiquitous access to quality-oriented, low-cost, personalised learning to every citizen, irrespective of the age and type of education.

### Need and significance

Virtual classrooms could not have existed, in any meaningful way, ten years ago. A lack of high-speed internet, tools, and general infrastructure made them a difficult thing to create. This is no longer the case, however. High-speed internet is the rule rather than the exception, and many tools (like blackboard, Skype, Google Docs, and countless others) have been created that are able to meet the needs of this new type of class. Most learning institutions also have an established infrastructure-- intricate websites, secure networks, and the like-- that allow for the support of virtual learning. These technology advances actually allow for a class to be held entirely online-- without them, virtual learning certainly wouldn't be the option that it is today.



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## LEARNING TOOLS FOR THE DIGITAL CLASSROOMS

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## Introduction

*The digital turn in education has been described across a wide range of initiatives and processes. These include the introduction of digital tools and gadgets as a part of the learning environment, building digital archives and repositories of learning and curriculum building, facilitating remote access to education through information and communications technologies infrastructure, improving quality of access to education and learning resources, building diverse and customised syllabi to accommodate alternative and contesting perspectives, building peer knowledge communities of information and knowledge production, and experiences into formal institutions of education. Different locations, contexts, geo-political circumstances, socio-economic factors, and cultural differences influence the spread, rise and integration of digital technologies in mainstream education. Much academic, policy and implementation attention has been given to these processes and several models of new learning environments and infrastructure have been postulated over the last two decades. The democratising promise of internet technologies has been largely if not exclusively about education, learning, literacy and production of knowledge from different parts of the world.*

Today's educators are challenged to integrate digital technology into the teaching and learning process, so we chose to combine the goals of supporting students with inquiry and with the use of digital technology in order to foster their learning of 21st century skills. Many technology tools and resources allow students collaborative opportunities that are not possible in traditional instructional environments. Digital humanities are presented as classroom savior, a narrative that competes against the idea that technology virtually guarantees student distraction.

Today's world, we would be hard-pressed to find an area of life that hasn't been affected by the process of digitalization. In other words, modern technology has pretty much permeated every pore of our society, and that includes education, as well. However, there is a lot of potential in that field that hasn't been taken advantage and that situation should be remedied in the future, because there are plenty of benefits of digital education are here to give. Modern technology enables



E-LEARNING: NEW INNOVATION IN THE DIGITAL ERA

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Introduction

According to Elliott (2013) e-learning suggests that e-learning is the use of network technology to deliver, select, administer and extended learning. E-learning is essentially imparting education through computer and network enabled digital technologies which include among other things, internet, intranet, computer, satellite TV, CDROM, audio and video resources. The term e-learning was first used in the professional environment in the year 1999 at CBT Seminar at Los Angeles. Therefore e-learning could be broadly defined as use of Information and Communication Technology (ICT) to enhance and support learning. This could range from teachers and students using e-mail for communication to entirely online courses. This term is used synonymously with virtual learning, online learning, computer based learning, web based learning, and networked learning. Whatever may be the definition of e-learning, it is currently changing the way schools and colleges teach and the students learn (Narayanan, 2001).

E-Learning focuses on self learning through electronic devices. It is an advanced concept which will provide students the support and atmosphere for self learning achieving maximum knowledge (Vidhya, 2012). For this, CD materials are to be provided properly. The CD for self learning should be made attaining quality and taking the individual difference in to consideration also there is an important aspect attached to this that is advanced and complete facility for reference and resources viz. the facilities virtual library should be provided along with this CAL, CAI, CAT, Tele conferencing technique should be utilized properly

The e-learning systems the theoretical frame work contains the three main components of information systems. These components are people, technologies and services. People interact with e-learning systems. E-Learning technologies enable the direct or indirect interaction of the different groups of users. Technologies provide support to integrate all the activities corresponding to pedagogical models and to instructional strategies. The complex interaction combination is the direct or indirect action with e-learning system. At the same time, systems provide services according to the specified strategies of activities. In

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SIGNIFICANCE OF TECHNOLOGY INTEGRATION IN THE PROCESS OF  
EDUCATION

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## Introduction

According to Kulkarni (1986), "Educational Technology may be defined as the application of the laws as well as recent discoveries of science and technology to the process of education." The word technology is derived from the Greek word "techno" which means the willingness, skills, knowledge of the way, rule, skill, tools and "logos" which means science, word, learning, mental state. There is no single term for educational technology. Educational technology is integrated with education in order to solve the problems existing in the teaching- learning process. When we are comparing traditional education with technology integrated education it is seen that education became more interesting and fruitful due to this integration.

According to Roblyer (2003), "Educational technology is a combination of the process and tools in addressing educational needs and problems with an emphasis on applying the most current tools; computer and their related technologies". Educational technology have been divided into three categories; educational technology with hardware approach, software approach and system approach.

## NEED AND SIGNIFICANCE

This is the world of technology. Large variety of technologies and tools are available in this decade. Educational technology is the key to the success of education. Educational technology tools help to understand the concepts and convert it from abstract to concrete to put it in a simple form. Expansion of Time and Place: Using the 'textbook plus classroom' approach, the places where learning can occur are limited. On the other hand a wireless laptop has access to the teacher's course material and the entire internet almost anywhere. Technology is a vastly larger resource than can be practically carried on paper in a backpack. Thus, information technology allows learning anywhere, anytime; not just in one particular classroom.

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DIGITAL INDIA – AN INTEGRAL PART OF OUR NATIONAL DEVELOPMENT

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Introduction

For years India has been a complex nation, making it difficult for the common man to access government services. Now India is rewriting its growth story in the global geopolitical economic landscape, charting new courses in its governance paradigm and striving to demolish the old images and impressions as viewed through lenses in the comity of nations to evolve into a 'New India' (Sharma, 2016).

The world must indeed know that today, outside of America and china, India is the third largest economy with a robust, fast growing market for goods and services. The changing face of India, constantly challenging the status quo is brimming with examples of its leadership leading from the front across a spectrum of sectors in the last three years. The time has arrived when the stereotypical representations of India have to be discarded and the story of this New India that is resurgent, resilient and resplendent needs to be captured in the face of crises and global threats (Naidu, 2017).

To realize the dream of a more efficient India, the Digital India Campaign was launched by the Prime Minister of India Shri Narendra Modi, on 1 July 2015 to set up Digital infrastructure and promote Digital literacy. The vision of Digital India is inclusive growth in many areas such as electronic services, products, manufacturing and job opportunities etc. Digital India Project aims to transform our country into a Digital economy with participation from rural or urban citizens and businesses (Singh, 2016). This will ensure that all the government services and information are available anywhere, anytime, on any device that is easy to use, highly available and secured. Digital India removes Digital gap between the rural and urban India. Digital India is to be implemented by the entire Government with overall coordination being done by the Department of Electronics and Information Technology.



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## BASIC COMPUTER KNOWLEDGE AND OPERATIONAL SKILLS AMONG SECONDARY LEVEL TEACHER TRAINEES IN THE CONTEXT OF TECHNO-PEDAGOGY

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### Introduction

Teacher is called as an architect and nation builder who leads their students from the darkness of ignorance to the light of knowledge. The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage (NCTE, 1998). The quality of teachers is a key predictor of students learning (Ololube, 2005). Therefore, teacher education to produce teachers of high quality is of utmost importance. The knowledge of ICT and skills to use ICT in teaching and learning process has gained enormous importance for today's teachers.

Teachers must understand their role in technologically-oriented classrooms. Merely introducing technology to the educational process is not enough but one must ensure technological integration since technology by itself will not lead to change. Rather, it is the way in which teachers integrate technology that has the potential to bring change in the education process. ICTs have qualitatively and quantitatively impacted on teaching, learning and research through teacher education. Teachers need training not only in computer literacy but also in the application of various kinds of educational software to teaching and learning. Thus, in the present era of technology, it becomes essential to every teacher should know the basic computer knowledge, operational skills, pedagogy and subject area content effectively in their daily classroom teaching. Furthermore, there is a need to learn how to integrate ICT's into classroom activities.

### Technology in Education with special reference to Teacher Education

Teacher education institutions may either assume a leadership role in the transformation of education and rapid technological changes. For education to reap the full benefits of ICTs in learning, it is essential that pre-service and in-service teachers have basic ICT skills and competencies. The Secondary Teacher Education Programme gives practice to the prospective teachers.

Information and technology is popularly using in educational field for making teaching learning process successful and interesting for students and



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## TECHNOLOGY AND ELECTRONIC MEDIA USE IN MODERN ERA

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## Introduction

The basis of communication media is powered by electronic technology. Electronic media includes television, radio, internet, fax, CD-ROMs, DVD and any other medium that requires electricity or digital encoding of information. It is interesting to observe the path of development of communication media from the first forms of print matter to the present day mobile communications.

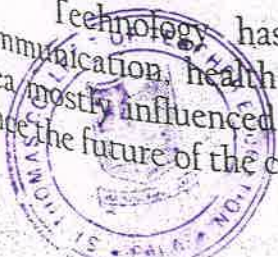
Today, the world has developed so much to use the fastest methods of communication. All these facilities are used in the field of education today. We can find that education has become very much a hi-tech program today because of electronic media use. . At the same time there are also disadvantages of using electronic media in education without limits. Many natural faculties like memory, writing, critical thinking etc. will be seriously affected if children are addicted to the use of electronic me.

Traditional education is associated with dictation and imposition which seems not acceptable now in most cultures. It has sometimes included: the use of corporal punishment to maintain classroom discipline or punish errors; inculcating the dominant religion and language; separating students according to gender, race, and social class, as well as teaching different subjects to girls and boys.

## Need and significance of the study

This study is needed because there is a wide spread of electronic media in our life and we need to have the proper knowledge of its advantages and disadvantages of it. Education today has become a commodity that includes the effects of all development in human society. Hence we analyze the issue and study its consequences.

Technology has covered all areas of human life today. It is in communication, health care, business, defense and education. Education is an area mostly influenced by today's technology. So we need to study the matter since the future of the country is in the hands of our young minds.



## Chapter-1

# Inclusive Education: Making Inclusion A Reality

Dr. TMMollykutty & Subi Mariya Zacharia

### ABSTRACT

*Inclusive education stands in contrast to 'special' education, where disabled students are educated in separate schools or classes, or treated very differently in the classroom to regular students. With inclusive education, all children are entitled to a place in their local school, they participate fully, and they achieve. Inclusive education means that barriers to each student's learning are identified, and resources and support are in place to overcome any barriers. Inclusive values such as equity, participation, community, compassion, respect for diversity and entitlement to education are a vital foundation in inclusive schools. The disabled students in the regular classroom do better than their peers in special education in mathematics and literacy, friendships, communication and behaviour. These higher achievements continue into adult life. Everyone benefits from the changes in teaching and learning needed for teachers to work successfully with a mixed group of students. Inclusive education has been widely researched internationally over the past few decades, and a number of countries are moving in this direction. Inclusive education (or 'inclusion') is an international response to the view that*



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## Chapter-4

# Significance of Inclusive Schooling and Expected Qualities of an Inclusive Teacher

Dr. TMMollykutty & Bincy AM, M.Ed. School

### Abstract

*Inclusive Education has great significance in the present scenario as it is introduced to fulfil the constitutional responsibilities and to achieve the universalisation of education. In this paper the investigator tries to explain the concept of Inclusive Schooling, the problems of inclusive children, the role of teachers in the successful working of Inclusive Schools and the expected qualities of an Inclusive Teacher. Inclusive Schooling is widely accepted because it brings all children, irrespective of their cast, creed, gender, place of birth, physical or mental conditions, economic backgrounds etc. together. Several programmes were started to raise the educational standards of physically and mentally challenged children. But Inclusive Schooling is an umbrella of education under its shade all children can sit together and get their needs. As a result of this the excluded children become more socialised, they can understand their strengths, develop confidence and they can lead a purposeful life. Normal children become aware of the problems of special children. Teachers help to make a desirable*

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## Chapter-5

# Inclusive Education and Mainstreaming

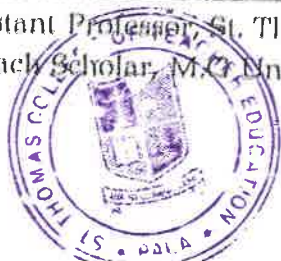
*Shri. Alex George & Mrs. Jincy Johny*

### ABSTRACT

*The aim of education is to develop the sense of unity in this world and promote the growth of a balanced and well intenerated personality of the child. Inclusive education is the education that best fits the present and future needs of the particular learners in question and the community, given the particular circumstances and prospects. The quality concept also has to embrace the development of the potential of every member of each new generation. Inclusive in education is also an approach once thought only necessary for educating students with special educational needs. Now it is crucial that all of teachers ensure inclusive practice for all students in their classroom and the wider school. Under the inclusion model, students with special needs spend most or all of their time with non-disabled students. Implementation of these practices varies. Schools most frequently use them for selected students with mild to severe special needs. Inclusive education differs from integration and mainstreaming, which tended to be concerned principally with disability and 'special educational needs' and implied learners changing or becoming 'ready for' or deserving of accommodation by the mainstream. Intergraded education refers to education*

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## Chapter-21

# A Study on Dyscalculic Upper Primary School Children in Kottayam District

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### ABSTRACT

Learning disability refers to a mixed group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, writing, reasoning or mathematical abilities. To be considered as one with learning disability, the child should have normal intelligence or above, have difficulty in at least one academic area, and have no other diagnosed problem or disorder, such as sensory handicaps or mental retardation that is causing the difficulty. Dyslexia, Dysgraphia and Dyscalculia are the major types of learning disabilities found among school-aged children. Dyscalculia is a learning disability involving Mathematics. The word 'Dyscalculia' means a 'disorder in calculation' (Hannell, 2005). It is a specific learning disability involving innate difficulty in learning arithmetic. Dyscalculia is a mathematical disorder where the mathematical ability is far below expected for a person's age, intelligence and education. It can manifest itself as a person's inability to understand basic number concepts and number relationships recognize symbols and comprehend quantitative and spatial information. It is estimated that between 4% and 6% of the population suffer

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