
INTERNET OF THINGS (IoT)

¹Mr. Charles Paul, ²Mr.B.Gowtham

¹Lecturer in Mathematics, ²PST in Mathematics

¹District Institute of Education and Training, Lawspet, Puducherry.

²Aditya Vidyashram Residential School, Villianur, Puducherry

ABSTRACT

Education being a socially-oriented activity, excellence education has traditionally been accomplished by teachers having personal contact with educators. Emergencies like the present one which has forced a learning gap in the teaching-acquisition process have changed the ICT TOOLS from being “**A Trend in Education**” to “**A necessity for Education**”. There is a global need for adaptation across various sectors especially in the field of education. As smartphones, laptop and tablet find a place in almost every house, it would be wise to make children use their smartphones to bridge the learning gap via various apps and through online software ICT tool. It is high that teachers gain knowledge about the various tools that enable creating safer environment and indulge students into the content being taught. Schools use an assorted set of ICT tools to communicate, construct, broadcast, store, and accomplish information. ICT has played a major role in all schools and colleges, where the chalkpiece are meant for writing, online software tools were used for teaching and assessment purpose. Nowadays teachers are digitally literate and equipped to use ICT, these attitudes can lead to higher order thinking skills, provide creative and individualized options for students to prompt their understandings, and leave students well prepared to deal with on-going technological change in society and the workplace. The method used in this paper is descriptive. This paper enlightens the ICT tools for educators and teacher and develops their communication skill during the pandemic period and brings the drastic change in the present’s education system.

Keywords: *Flipped Classroom, ICT tools, Digitally Literate, Techno oriented, Safer Environment.*

INTRODUCTION:

Information and communication technologies (ICT) have become mainstream entities in all aspects of life. Across the past twenty years, the use of ICT has radically changed the practices and procedures of almost all forms of Endeavour within business and governance. In this today’s world ICT plays a major role in all Educational Institution to provide vast knowledge and new experience for the Educators and to improve the Education in a full lively mood to attract the interest towards the subject concept and content. There are various Online software Tool that can be introduced in towards ICT world. These ICT tools that can be used to bring about a learner-friendly environment and to make the acquisition process keep going. ICTs are making dynamic changes in society. They are influencing all aspects of life. The influences are felt more and more at schools and college levels. Because ICT provide both educators and teachers with more opportunities in adapting acquisition and doctrine to individual needs.

OBJECTIVES:

- To enhance the necessity of ICT in the field of education during pandemic times.
- To enlighten the usage of various ICT tools to enable a safer learning environment.
- To gain and develop knowledge on creating student centered learning environment through usage of various ICT tools.

Information and Communication Technology (ICT)

In Schools

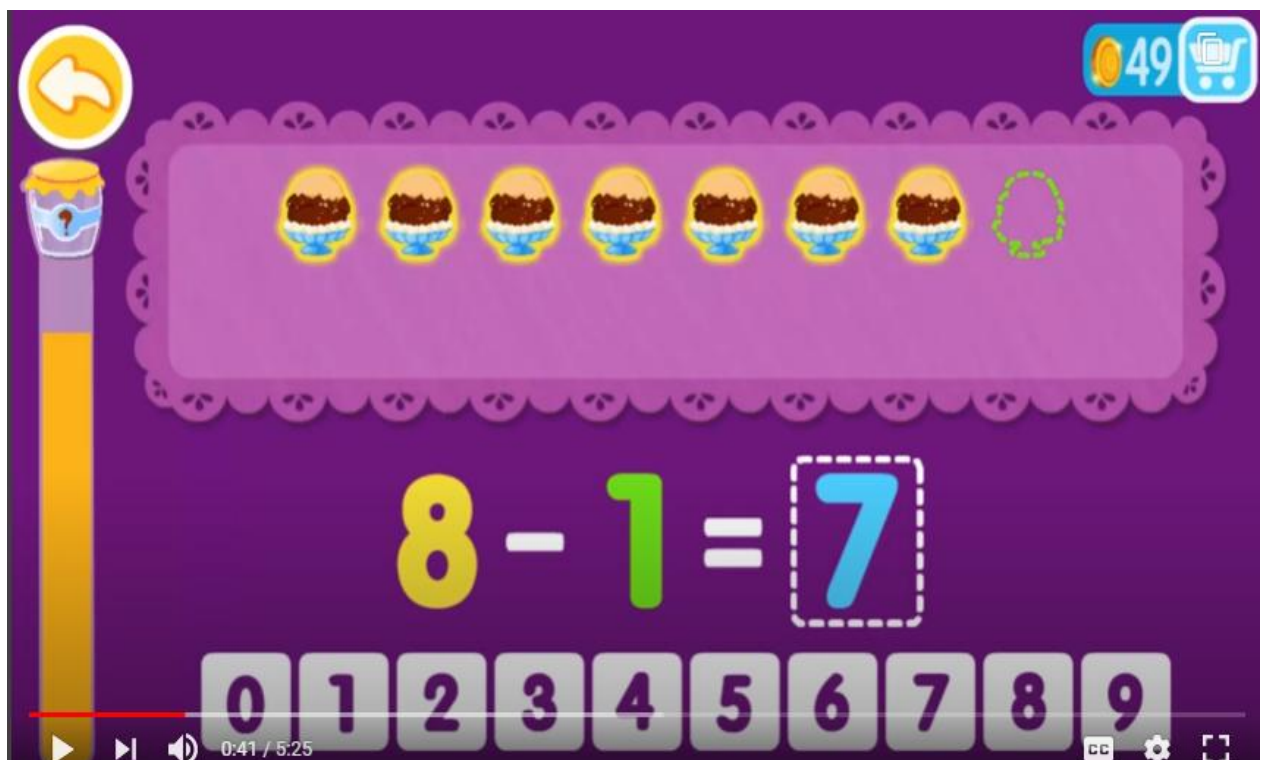
In Schools nowadays they are using Digi-Board to teach the content and exam oriented concepts are reached into the educators hands. Books, Pen and Pencils are past, Digi board, Cellphones, Email, Apps are plays a vital role in all the Schools in order to familiarize the complex problems to simple one. Classwork and Homework Materials are sent in Google classroom, where the past and future notes, reference materials remains as it is. Later the educators and teachers can refer the materials when they have doubt. Both in Primary and Higher Secondary Classes are using computing techniques and online software tools effectively. Where the Educators can do trial and error method on their own to correct thier mistakes and doubts will be clarified too. Many other animation softwares will be more helpful for the Teachers and Educators to gain more knowledge and ability to do the problem without any frustration and with more interest. Now, in Pondicherry the use of ICT has reached 99% in each and every Schools.

In Colleges.

In Colleges, the use of Information and Communication Technology has plays a essential role to reach out the content, concepts and materials, where the distance and regular classes were spent through online, the reference materials can go through easily without any tension and the doubts clarification session are conducted through online. So, this ICT makes the Teachers and Educators can feel comfortable for their future use. When compared to offline courses, online classes gains more attendance. The internet and ICT has provide variety of options to get additional materials for their relevant courses.

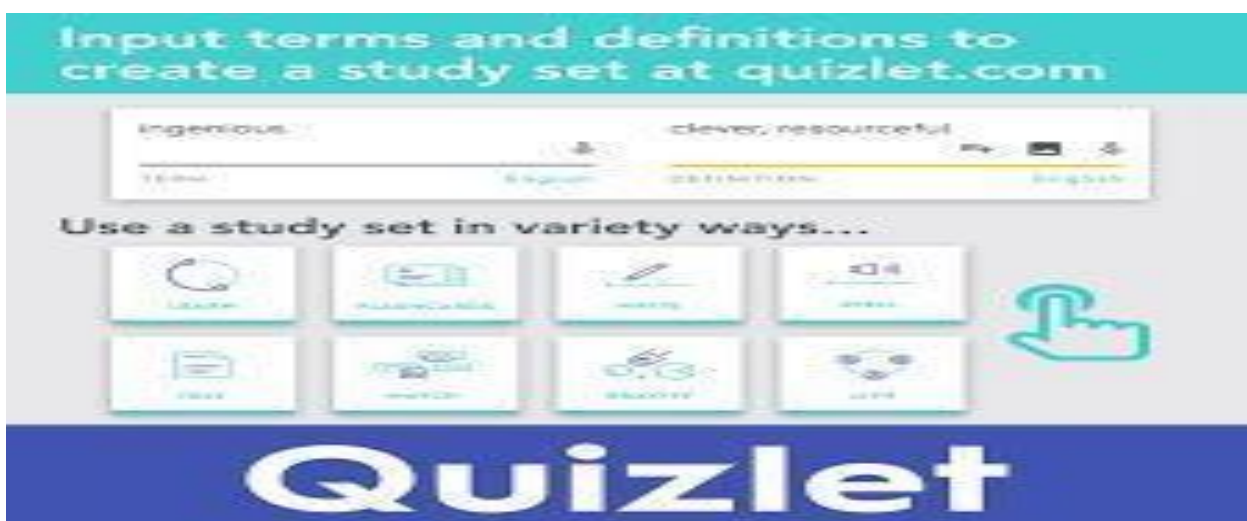
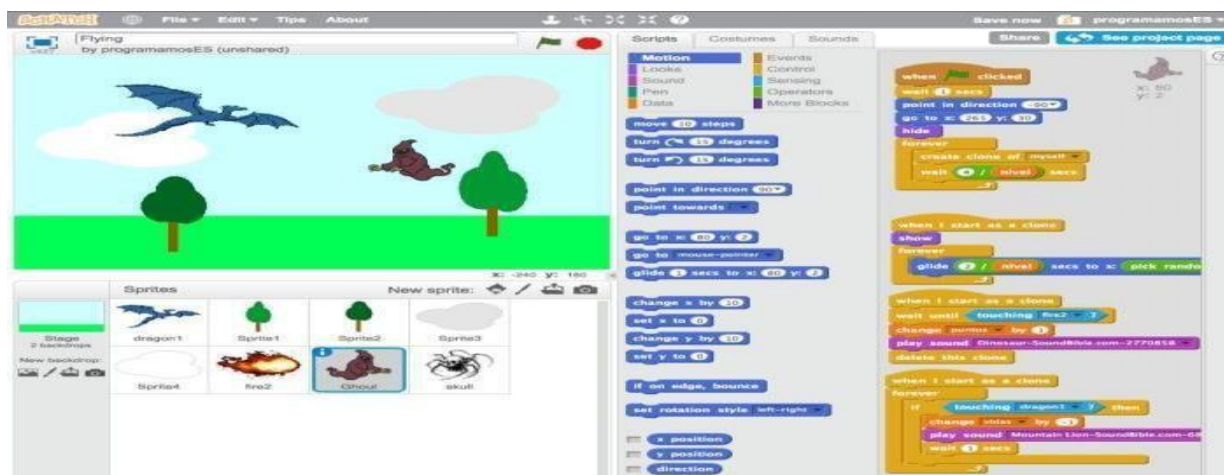
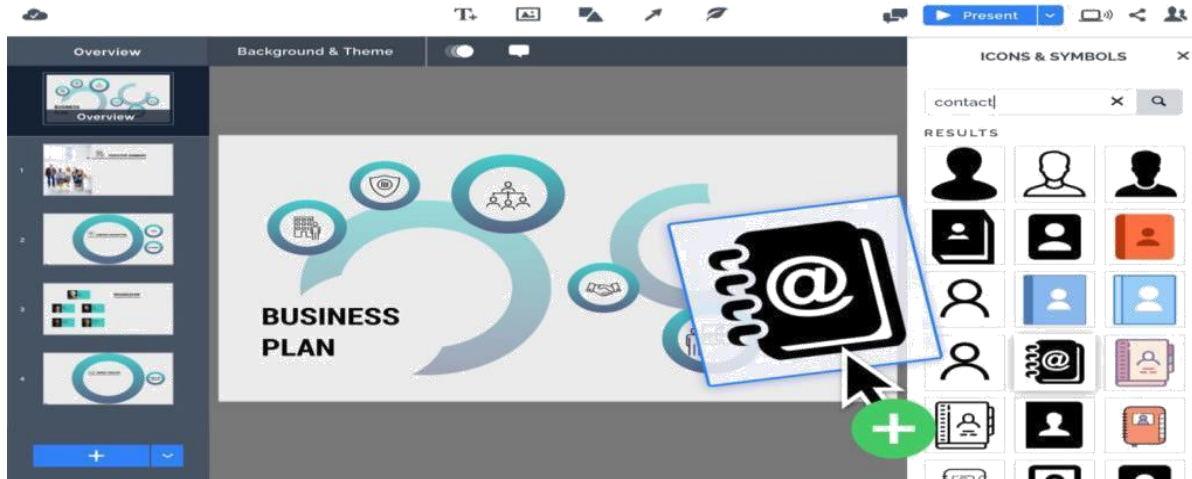
SCRATCH animation in Tamil subject:

This learning tool is animation software and helps teachers in creating their own animated versions of the content being taught. The animation requires simple coding and instructions which is why it can be easily mastered by all teachers in a very short time. These animations and other online software ICT tools can be used to engage students into the content in case of any subject and can be used to teach the content itself in case of language subjects. This software helps teachers to narrate stories in a realistic way and keep students engaged even when they are not in face-to-face contact.



PREZI:

Prezi is online zooming software that allows us to present content in an attractive way suitable for learners. It is easy to use this software that will require us to give content as we do in a formal power-point presentation but presents it in zoomed way and thus distinguishes content and captures the student’s attention throughout this presentation. This tool is especially used for content creativity in order to grasp the educators interest, intention and attention



QUIZLET:

Quizlet allows teachers to present content in the form of flash cards. Once the flashcards are created, the software presents the content in a variety of ways to be studied by the students. This software also allows teachers to evaluate students through tests via variety of questions. Teachers can also conduct a live formative assessment by creating games and sharing the link of the game for all students to perform at the same time. This software provides teachers with a performance graph of students instantaneously as and when the students take their evaluation in any form.

LITTLE PANDA MATH ADVENTURE TOOL:

Little panda is a type of Math Adventure, where the students will learn out the sums in a way of happy mood. They feel very comfortable with this tool. This tool has a special feature of gaining the students attention, interest towards the mathematics subjects. Even a below and average students are coming up with their own interest to solve the sums on their own. This software tool can be used for assessment or evaluation purpose. Where the educators can correct their mistakes on their own. Even the Teachers can use this tool for basic operation. The symbol they have used in this tool will surely remains the full concentration and to gain knowledge for the students. The reinforcement that they have used in this tool in that sense, if the educators choose the right answer, they will gain golden coins.

MONSTER MATHEMATICAL SOFTWARE:

Monster Mathematical software is a great tool, where the educators can learn the mathematics through games. It consists of basic operation, divisibles and lot of mathematical ideas were inbuilt in this software. So, this tool will have the super power to gain the students attention, interest towards the subject matters. This tool has the stipulated time limit, in that the educators has to identify the answer for the given command. These types of tool are slowly entering into the school world, and they were using it for evaluation purpose.



SUGGESTIONS:

- Teachers and school heads should be aware of the new initiatives and awareness undertaken in the field of education.
- Adapting student friendly software will help in improving learning outcomes of children during pandemic times.
- Teachers being socially responsive should cater to the emotional and psychological needs of students via ICT tools.
- ICT tools should be used as modes of changing the rote learning habit among students.
- ICT develops the educators to come up with lot of ideas and creativity.
- So, many Internet of Things and subject related software tool has been playing a major role, starting from pre-primary to higher secondary level.

CONCLUSION:

These above software are very much helpful for the teachers to prepare the content in different ways in order to engage the child with full lively and to create interesting path in online mood. These animation software tool makes the educators to keep their concept without forgetting it for a long time. Thus, ICT tools prove to be a great help during the pandemic times like the present one. Developing knowledge about these tools will be a great objective to the teachers not only during these pandemic times but also when they return to their classroom situations to create indulging environment. So, these software is a great treat for both teachers and educators to hold up the content and concept.

ACKNOWLEDGEMENT:

I would like to thank Lecturer **Mr.P. Charles Paul** and **Mr.M. Arunagiri** for their expert advice, stimulation, motivation and encouragement throughout this project.

REFERENCES:

1. <https://scratch.mit.edu>
2. <https://prezi.com/>
3. Collis, B., & Jung, I. S. (2003). Uses of information and communication technologies in teacher education. In B.
4. <https://quizlet.com/latest>
5. Jonassen, D.H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? Educational Technology Research and development, 39(3),5-14.
6. <https://itpd.ncert.gov.in>
7. Pearson, J. (2003). Information and Communications. Technologies and Teacher Education in Australia. Technology, Pedagogy and Education, 12(1),39-58.