Analytical Demarcation of Digital Tools Applicative for Teachers in Online Education

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Abstract:- **Digital tools are specific technological aspects which can facilitate a teacher for imparting conceptualized content to the learners effectively. Learners as well can make use of various such facets of technology for effective comprehension of what is taught to them. In view of existent Internet in this twenty first century & its technological advancements day by day, digital tools are available in abundance for various purposes including the domain of education. It would be convenient for the teachers to use these digital tools with full command for effective teaching especially when teaching mode adopted is online. This paper focuses on arranging the digital tools with a specific analytical view such that teachers of online education would have some enriched or a comprehensive idea about use of digital tools having different functionalities. This paper explains in brief the significance of use of digital tools by teachers for effective teaching while elaborative deliberation is done on categorization of digital tools for exploring them easily for convenient use in teaching and learning process. Systematically grouped components of digital technology are expected to contribute all stakeholders in teaching–learning process. The main objective of this article is to prioritize those digital tools in classification which can specially be used in online mode of education.**

Key Words: Digital Tools, Teaching& learning, Types of tools, Resources, Assessment

INTRODUCTION:

Concept of Digital Tools:

Digital tools can be defined specially prepared software programs, websites or technically devised online resources that enable the Teachers and learners understand the content and complete their tasks easily. Most of them are available on internet and can be accessed from anywhere irrespective of whether learners are in classrooms or at home. Most of them can be operated without downloading. Conole et al (2008) highlight i) students' specific expectations for the internet as a first access point for information, and for all involved in the learning process to ii) access up-to-date information and iii) be able to communicate on demand.

It depends on how learners pay attention and make use of them for teaching and learning purposes. However, one has to make use of them securely.To be abreast of digital tools and their availability is an essential need of the hour. Basically following are the Digital Tools & some vital Resources

- Microsoft Word documents.
- Power point presentations
- E-reference materials & content.
- Apps available in electronic gadgets like tabs & phones

It is essential to know why digital tools are important in teaching –learning process. Digital tools are advantageous in terms of consistency, security, efficacy and their appropriate and specific usage. Digital tools are used in the educational institutes, business concerns and administrative organizations all over the globe without any restrictions in geographical boarders. There is a tremendous growth in dependency on computers to complete works of different nature and broader ranges. This has necessitated hitting upon more digital tools to find digital solutions. Weller (2011) calls learners as digital scholars' using technology for all forms of research and retrieval of information, communication, data processing and manipulation, storage and analysis. However the pace of learning for students, teachers and developers must increase.

Awareness on Pros & cons of digital tools and their usage in teaching learning process enables the teachers employ the digital tools effectively.

Advantages of using Digital Technology:

- Smoothness in connectivity.
- Pace of communication and different modes of working.
- Portable facility of Digital devices.
- Maintenance of the quality of information preserved.
- Qualitative approach to Learning.

Problems faced in using Digital Technology:

- Difficulty in securing data.
- Social detachment or separateness.

- Overburdened work
- Reduced job opportunities

DIFFERENT TYPE OF DIGITAL TOOLS:

- LinkedIn: LinkedIn is a social media platform that's specifically created to cater to the corporate world.
- Face book: This is arguably the biggest social media platform out there, making it an essential tool for digital relevance.
- Instagram.
- Other Platforms.
- Company Website.

SIGNIFICANCE OF USING DIGITAL TOOLS IN THE DOMAIN OF EDUCATION:

When a teacher enters a lab he/she should become a researcher, examiner, writer and digital citizen. A teacher should play all the roles to be an effective teacher whether it is on line or offline. Teacher should have efficacy in using digital tools in imparting education to students. Using digital tools in teaching & learning provides different learning experiences, prevents wastage of teachers' time, facilitates the teacher to offer tailor made solutions to meet the needs of students. It also helps in tracking student progress in their learning aspects and provides perspicuity in the process of acquiring knowledge & skills

It is the responsibility of teachers to incorporate available technologies to blend them appropriately for procuring tailor-made learning experiences for learners of different levels. Building vocabulary with technology in classroom has to be done by teachers; chrome books, laptops, computers and ipads can be used effectively. Students try to avail technical issues relevant to digital & technical tools in a formative mode to enhance their vocabulary, word lists and jargons.

Use of **ELA digital interactive notebook** in Google classroom is an essential feature in online teaching &learning process. Flexibility and multiple uses are offered by these digital tools. Students can fill their templates in Google slides while reading some text. Most teachers have been relying on Google classroom. They can edit their planner in Google slides. Digital interactive notebook can be edited and used in Google slides for classroom. Editable DINB templates are also available. **iStudiez** is a helpful app for students to make use of it in their academic planning which helps in organizing and presenting the content.

RESOURCES OF DIGITAL TOOLS:

- Typing agent--for typing practice
- Guided reader—to read, listen and take quizzes
- Relex and freckle—reading and maths practice
- Vooks, storyonline, brainpop --- for animated books
- Mistery science—online science lessons
- Learning stations; teachers have to learn how to structure learning stations in Google classrooms by using Google docs, slides &forms. We can use these learning stations as a way to scaffold content/skills into manageable engaging parts. Useful for students –facilitate the students use in remote learning.

Online digital learning stations; there are various ways of creating digital learning stations.

1. Slides and Google forms
2. Google forms with images
3. Google forms with text and links
4. Slides and classroom questions
5. Slides with built-in-answers
6. Jigsaw slides
7. Hyperdocs
8. Webquests
9. Mix and match tools

Teachers can use formative assessment through self assessment for students. Formative assessment is an accountable feature in learning & success of students for which digital tools can be used effectively.

Tools useful for formative and summative assessment:

1. **ASSISTments**—maths platform
2. **Edpuzzle &Adobe Spark**—can convert video into quick assessment. We can insert any quiz anywhere in a "you tube video" and track your students' progress. There is an application called Adobe Spark that enables students to produce short, animated, narrated explainer videos. Students can easily add photos, video clips, icons, and voice, as well as professional-quality soundtracks and cinematic motion to their video creations. Video and vlog making is a great way to engage students creatively, and an 'out of the box' approach to class projects or reviewing learning materials
3. **Edulastic**—teachers can create and track assessment
4**. Explain everything**—easy to use online whiteboard—can be used on any device
5. **Gimkit**—quizzes can be conducted as it is done in kahoot.

Technology has a fundamental role to play in this modern era. There are quite a few digital tools to facilitate communication among teachers and learners. Innumerable tools have been created to provide autonomy to students in order to improve the

aspects of academics and to enhance their overall personality to succeed in their job trials. In higher educational institutes, staff can be encouraged to improve learning opportunities for students through supported experimentation with learning technology tools, their confidence and their personal identity as digital practitioners. Higher Education institutions have to grasp the digital nettle fast, sheer enthusiasm will not do – reflecting Marshall's view (2012).

Edmodo is an important tool that tool connects numerous learners to create a more enriched, personalized, and aligned learning process that takes advantage of options provided by the world of digital technology.

StudyBlue is a large and powerful study helper that allows people to read from anywhere and access over 500 million various learning resources including flashcards and notes. **StudyBlue** helps one in getting connected with other students, find the best study materials, and participate actively in quizzes. **Quizlet, Cram, and Brainscape** are all alternatives to StudyBlue.

Socrative is a digital tool, a classroom app, which could be used on mobile devices, smart phones, laptops, or tablets for fun and successful classroom participation. It's a type of system which allows instructors to develop exercises, educational games, and quizzes, as well as test the students right away. Students might use the above-mentioned technologies to overcome these tasks in games. Teachers can view the outcomes of the exercises and, based on this information, adapt following sessions to make them more customized. This could be used as a way of assessing, giving teachers' useful and fast feedback. Quizlet enables learners and trainers prepare their own quizzes, images, diagrams and other relevant learning materials.

Another digital tool for students is **Projeqt**, which lets them build multimedia elements including slides containing maps, relevant links, online quizzes for testing & movie clippings.

Thinglink is an incredible resource for instructors to use. Educators can use music, sounds, texts, and photographs to create interactive images. These can be used by with the help of websites as well as social media sites like Twitter and Face book. This technology allows trainers to design knowledge acquiring techniques that tap learners' enthusiasm.

TED-Ed is a digital tool in the form of a website that allows users to actively participate in the learning process of others. This is a platform that enables instructors, students, and other stakeholders who wish to share information and good concepts to associate with others on generating pedagogical environment. Even if they have never heard of them, students can discover hundreds of fascinating and encouraging lectures and ideas from amazing people through TED.

Ck-12 is an open source interface which facilitates users to build and distribute teaching content through internet that can be updated. This material can include movies and appropriate interactive tasks. Based on the needs of learners materials can be printed. The materials developed in cK-12 can be tailored to each instructor or student's needs.

ClassDojo is a tool for enhancing student conduct in which professors provide immediate feedback wherein their behavior in class can be rewarded with point. It sends pupils authentic notifications, such as "Good, keep it up" for collaborative work. The data gathered on student conduct can later be communicated with parents and authorities over the internet.

eduClipper is a platform that enables learners and educators to communicate effectively. To discover appropriate teaching resources, teachers and students can gather material from the internet and share it with other participants of formerly formed groupings. This helps them improve research methodologies online, and retain a digital record of what they have learned. It also allows professors to hold an online class for students and construct a portfolio that contains all of their completed work.

Storybird is a digital application that enables instructors to produce beautiful books online using a simple and user friendly contextualized environment. The articles that are made would be incorporated on the internet or, emailed. Faculty can make use of applications to collaborate on projects with students, Focus on providing frequent feedback to pupils, and manage lessons and grades. This programme attempts to help children improve their English language proficiency through telling stories.

Qualitative videos can be created using a digital tool called **Animoto**. This tool enables teachers to make audio visual content from electronic device such as mobile to encourage pupils and assisting in the improvement of academic sessions.

Kahoot, a learning platform, can be used to focus on games and questions. This can be effectively used to prepare questionnaires, conversations, and surveys in line and requirements of academics.

Scratch allows the teachers to build interactive games, animations, and slideshows using music, images, and photos. Members of student's online group can share all this content. It's crucial to remember that Scratch is a tool to guide programming skills.

The **Goconqr** app offers a large digital library for students& for educators to develop their own content. Portals can be constructed and clubs can be constituted using this application. Even announcements can be made in the institutions.

Prezi allows teachers to zoom in and out as well as move in different sides on canvas, focus on visual content that the learner has entered. **Pinterest** is brimming with ideas and offers an endless supply of visual information to get students working on projects and tasks.

'Real-world' 3D designs can be created using a cloud based 3D Software named **SelfCAD**. In collaboration with another programme, **MyMiniFactory**, thousands of 3D things can be printed right away.

Google Classroom is a strong social learning platform. Learners can pose questions and get answers from their lecturers and classmates. Teachers can incorporate difficult questions and materials which can be used by learners to review at their convenient time. This can be integrated with other Google products, such as Google Forms for gathering student feedback.

Students can use the **UniCalculator** app to figure out how many marks they need to get a certain grade in a class.

Khan Academy provides videos, interactive exercises, and challenges to help teachers offer lessons. Learners can also earn badges for their accomplishments. This Academy adopts a fantastic method to complement the teacher, give extra work to exceptional and talented students, and assist those who are struggling with a particular subject.

Some of the apps that students can use scans using cameras of their smart phones' include **Google Lens, Office Lens, and Bixy Vision**. Teacher can identify and interpret items, then recommend activities to the learner relying on the analysis of objects.

Notability is regarded as one of the greatest note-taking apps on the market. PDFs, images, GIFs, innovative ideas and relevant notes can be prepared using this note-taking app for future references.

Interested learners can enrol in one of **Coursera**'s hundreds of Massive Open Online Courses (MOOCs). These courses are planned in collaboration with various colleges and businesses. **Future Learn, edX, XuetangX, Udacity, Udemy, and Mirada X** are some of the other sites that provide a variety of MOOCs (Spanish).

Apps for certain subjects are also available. **Duolingo** may be used to study languages, while Google Earth can also be used to display geographical images.

On today's university campuses, personal safety has become a top priority. **Bsafe & Circle 6 bSafe** app, Circle of 6 enables you tap your location to send it to anyone, letting them know where you are and if you need help. As a matter of social security, instructors and kids need to be aware of these apps.

CONCLUSION:

All digital tools are used for specific purposes such as to collect and map the different arguments of a debate, Commenting / feedback, Decision-making, Ideas generation, Interactive Question &Answers, making Discussion forum, Virtual conferencing, utilize Digital learning software ,Strategic Planning and to give get advice. Digital tools are part of interactions of various kinds that take place between different entities. As mentioned by Goulah,J.(2007), in terms of digital technology, language learning, and literacy, the forum of student-student interaction, student-teacher interaction, and student-computer interaction (directly or as a meditational tool for the previous two) is best understood from a socio cultural perspective (p.64). It can be stated that abundant digitally equipped tools are available to use in the classroom environment. Some of the best are thus focused specifically those that are devised for improving and managing learning.

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