Educational use of Interactive Whiteboards and Web 2.0 Tools (The Innovations of Modern Educational Technology in ODL system).

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Abstract

An interactive whiteboard (IWB) is a touch-sensitive screen that works in conjunction with a computer and a projector. The first interactive whiteboard was manufactured by SMART Technologies in 1991. Web 2.0 tools enable users to contribute content easily to the Internet and communicate with others. Blogs and wiki are frequently mentioned tools with educational applications in the Read/Write Web, though many other tools and platforms fall into this category. The purpose of this study is to aware the educant, educators as well as the administrators about the use of innovations of educational technology in general and of Interactive White boards and Web 2.0 tools in particular in teaching learning process. Interactive whiteboard is used a tool for collaboration, improving student learning outcomes and streamlining lesson planning. Interactive whiteboards are an effective way to interact with digital content and multimedia in a multi-person learning environment. Blogs provide teachers an excellent tool for communicating with students. Blogs are highly motivating to students, especially those who otherwise might not become participants in classrooms. Wiki is a piece of server software that allows users to freely create and edit Web page content using any Web browser. Wiki supports hyperlinks and has simple text syntax for creating new pages and cross links between internal pages on the fly.

Introduction-

Educational technology plays an important role in education, employment, productivity, trade, economics and quality of life. Educational technology is a branch of science that combines the study and interaction of education and technology. The complex relationship between education and technology has benefited the mankind since prehistoric terms. Those were times when technology was used and practiced in various processes by common people, without knowing their complex mechanisms. However, it was in the twentieth century and particularly its later half that Educational technology witnessed revolutionary changes. Many a research was conducted and newer horizons reached during that period. This study is intended to educate students, teachers and principals on what technologies are presently obtainable for education. Document cameras, projectors and computers are turning out to be typical spot in the classroom. Document cameras are an amazing piece of technology utilized in education today. Many universities nonetheless use transparencies and overhead projectors. Projectors and interactive whiteboards (smart boards) are in practice now a day. World Wide Web became obtainable. Multimedia, simulations, videos, maps, study, and so forth... Projectors allow for whole class understanding and engaging discussions that extend from a specific subject or skill. From the above let us have a broader outlook on Interactive whiteboard, blogs and wiki.

Interactive Whiteboards: An interactive whiteboard (IWB) is a touch-sensitive screen that works in conjunction with a computer and a projector. The first interactive whiteboard was manufactured by SMART Technologies in 1991. A projector projects the computer's desktop onto the board's surface where users control the computer using a pen, finger, stylus, or other device. The board is typically mounted to a wall or floor stand. They are used in a variety of settings, including classrooms at all levels of education, in corporate board rooms and work groups, in training rooms for professional sports coaching, in broadcasting studios and others. Educators were the first people to recognize the interactive whiteboard's potential as a tool for collaboration, improving student learning outcomes and streamlining lesson planning. Educators continue to comprise the largest user base for this technology, particularly in the United States and the United Kingdom.

Use of Interactive whiteboard for a learning Environment Interactive whiteboards is an effective way to interact with digital content and multimedia in a multi-person learning environment. Learning activities with an interactive whiteboard may include, but are not limited to the following:

- Manipulating text and images
- Making notes in digital ink
- Saving notes for later review by using e-mail, the Web or print
- Viewing websites as a group
- Demonstrating or using software at the front of a room without being tied to a computer
- Creating digital lesson activities with templates, images and multimedia
- Writing notes over educational video clips
- Using presentation tools that are included with the white boarding software to enhance learning materials.
- Showcasing student presentations

Web 2.0 tools: Web 2.0 tools enable users to contribute content easily to the Internet and communicate with others. Blogs and wiki are frequently mentioned tools with educational applications in the Read/Write Web, though many other tools and platforms fall into this category.

- using blogs in the classroom

- using wikis in the classroom

- "Group audio blogging" and Voice Thread.

Using Blogs in the Classroom: As the Internet becomes an increasingly pervasive and persistent influence in people's lives, the phenomenon of the blog stands out as a fine example of the way in which the Web enables individual participation in the marketplace of ideas. Teachers have picked up on the creative use of this Internet technology and put the blog to work in the classroom. The education blog can be a powerful and effective technology tool for students and teachers alike.

Blog: A blog (sometimes referred to as a weblog) is a Web publishing tool that allows authors to quickly and easily self-publish text, artwork, links to other blogs or Web sites, and a whole array of other content.

Blogs are set-up like conventional Web sites, with navigation links, and other standard Web site features. Blogs have one standard characteristic, however: the posting. Blog postings are text entries, similar to a diary or journal, which include a posting date and may include comments by people other than the author, photos, links, or other digital media Postings are often short and frequently updated. They appear in reverse chronological order   and can include archived entries. Although blogs have been around for years, they have recently gained in popularity and consequently have received more media coverage. Blogs work well for students because they can be worked on at virtually any time, in any place with an Internet-enabled computer. Hence, they can be used by computer savvy teachers to create a classroom that extends beyond the boundaries of the school yard.

Use of Blogs for Teachers: Fortunately for teachers, blogs are surprisingly easy to use. They require minimum technical knowledge and are quickly and easily created and maintained. Unlike many traditional Web sites, they are flexible in design and can be changed relatively easily. Best of all, students will find them convenient and accessible via home or library computers.

Educational   Benefits of Blogs: In addition to providing teachers with an excellent tool for communicating with students, there are numerous educational benefits of blogs. Blogs are:

- Highly motivating to students, especially those who otherwise might not become participants in classrooms?

- Excellent opportunities for students to read and write.

- Effective forums for collaboration and discussion.

- Powerful tools to enable scaffold learning or mentoring to occur.

Using of Blog in the Classroom: As an educational tool, blogs may be integrated in a multi-faceted manner to accommodate all learners. Blogs can serve at least four basic functions.

Classroom Management: Class blogs can serve as a portal to foster a community of learners. As they are easy to create and update efficiently, they can be used to inform students of class requirements, post handouts, notices, and homework assignments, or act as a question and answer board.

Collaboration: Blogs provide a space where teachers and students can work to further develop writing or other skills with the advantage of an instant audience. Teachers can offer instructional tips, and students can practice and benefit from peer review. They also make online mentoring possible. For example, a class of older students can help a class of younger students develop more confidence in their writing skills. Students can also participate in cooperative learning activities that require them to relay research findings, ideas, or suggestions.

Discussions

A class blog opens the opportunity for students to discuss topics outside of the classroom. With a blog, every person has an equal opportunity to share their thoughts and opinions. Students have time to be reactive to one another and reflective. Teachers can also bring together a group of knowledgeable individuals for a given unit of study for students to network and conference with on a blog.

Student Portfolios

Blogs present, organize, and protect student work as digital portfolios. As older entries are archived, developing skills and progress may be analyzed more conveniently. Additionally, as students realize their efforts will be published, they are typically more motivated to produce better writing. Teachers and peers may conference with a student individually on a developing work, and expert or peer mentoring advice can be easily kept for future reference.

Description of Wiki

Wiki is a piece of server software that allows users to freely create and edit Web page content using any Web browser. Wiki supports hyperlinks and has simple text syntax for creating new pages and cross links between internal pages on the fly.
Wiki is unusual among group communication mechanisms in that it allows the organization of contributions to be edited in addition to the content itself.

Like many simple concepts, "open editing" has some profound and subtle effects on Wiki usage. Allowing everyday users to create and edit any page in a Web site is exciting in that it encourages democratic use of the Web and promotes content composition by nontechnical users.

<u>Wikis for an Interactive Classroom</u>

Wikis are an exceptionally useful tool for getting students more involved in curriculum. They're often appealing and fun for students to use, while at the same time ideal for encouraging participation, collaboration, and interaction. Read on to see how you can put wikis to work in your classroom.

Resource Creation

Using these ideas, a student can collaboratively create classroom valuables.
1. **<u>Virtual field trips</u>:** Students can research faraway places they would like to go on a field trip, and get them to share images and information about the location.
2. **<u>Create presentations</u>:** Instead of using traditional presentation software, one can present on a wiki.
3. **<u>Write a Wikibook</u>:** It can make a class project to collaboratively write a reference book that others can use.
4. **<u>Study guides</u>:** Students can ask to create study guides for a specific part of the unit you're studying.
5. **<u>Readers' guides</u>:** Students can create readers' guides to share their favorite and most important parts of works they read in class.
6. **<u>Solving wiki</u>:** Post difficult math problems, such as calculus, so that the class can collaboratively solve them.

7.   <u>**Glossary:**</u> Students can create a glossary of terms they use and learn about in new units, adding definitions and images.

8.   <u>**Class encyclopedia:**</u> Students can create an "encyclopedia" on a topic, adding useful information that can be built upon through the years.

9.   <u>**Create exploratory projects:**</u> If teachers teaching a new subject, he can ask his students to collect and share information in the wiki so that they can learn together.[39]

Student Participation

These projects are sure to get students involved.

1. <u>**Exam review:**</u> To Encourage students to share review notes and other helpful pieces of information on their classroom's wiki.

2. <u>**Peer review:**</u> Students may allow drafting their papers in a wiki, and then asking other students to comment it.

3. <u>**Student portfolios:**</u> Assign portfolio pages to each of class students, and allow them to display and discuss their work.

4. <u>**Correction competition:**</u> Teacher can post a document riddled with mistakes, then have students compete to see who can fix the most errors fastest.

5. <u>**Peer editing:**</u> Students can be asked to edit each others' work for spelling, grammar, and facts based on a style guide or rules you've defined.

6. <u>**Vocabulary lists:**</u> Teachers can Encourage students to submit words that they had trouble with, along with a dictionary entry.

7. <u>**Get feedback:**</u> Teachers can ask students to post comments on wiki pages.

8. <u>**Share notes:**</u> Teachers can motivate students to share their collective information so that everyone gets a better understanding of the subject.

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