Use of Educational Apps in Today's Classroom

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ABSTRACT: In today's world, various tools and technologies have been used in learning. The rapid and constant pace of change in technology increases opportunity for students. The opportunities include greater access to rich, multimedia content, the widespread availability of mobile computing devices, the expanding role of social networking tools for learning and professional development, and the growing interest in the power of digital games for more personalized learning. According to the National School Boards Association, students who are exposed to a high volume of technology perform as well as expected on standardized test [1]. Various Multi-National Companies like Google and Apple are introducing new Educational Apps which combines interactive technology with educational materials that has been proven to help accelerate learning and promote more innovative methods of retention than a simple textbook and a set of cue cards could ever do. In this paper, we would like to emphasize the importance of Educational Apps in class room teaching. Specific topics addressed include: (a) Various Educational Apps and its use inside the classroom (b) Universities promoting the use of Educational Apps (c) Challenges and Disadvantages in using Educational Apps (d) Directions for future research.

KEYWORDS: Educational Technology Tools, Technology and learning, Research designs and trends, Impact of technology on learning, Educational Apps, Google Apps, IPAD App.

I. INTRODUCTION

Information Technology has brought revolution in a common man's life. Those were the days, where a common man has to go behind the information, but whereas today, Technology brings the information just on the tip of a Finger. In a Traditional Classroom, knowledge to the Student was given through traditional teaching methods and pre-designed curriculums with reference to specific textbooks. But Today, Classrooms are filled with various Electronic gadgets and creative problem solving methods to enhance the students" knowledge. Gone are those days

where a student looked like a bunch of hunched over turtles trying to carry all those books. Now, all those heavy books can be neatly organized and stored in one simple, portable device.

In a traditional classroom students" knowledge were limited to the knowledge of a Lecturer and specific text books. Traditional methods having some of the major issues with non-availability of text books on specific course, Identifying and contacting experts on specific domains, lacking of resource on knowledge sharing with a group of experts are few. Now students can gain knowledge from his/her electronic gadgets like iPAD or TABs through innumerable Educational Apps. Taking this into consideration, several educational Apps have been introduced in the market. Using mobile apps in education seems to be inevitable in Todays classroom. The most popular using apps are available in app stores for downloading; few of them are Google Play for Android Operating System and App store for IOS. Though I PAD seems to be the leader in the choice of Tablets used in schools. The growth of modern educational apps helps the student community to keep the availability of needed resource on their hand. In future, educational world is just not looking simple apps, but they are expecting flexible, cost effective apps with high resource accessibility options. The content of this paper is organized as (2) Survey of related works (3) Educational apps with its features (4) Apps usage in Classrooms (5) Problems and Challenges (6) Conclusion and Recommendations.

II. RELATED WORKS

Uses of iPADs or TAB"s inside the classrooms are promoted in United States, United Kingdom and Middle East countries. But it"s a big challenge in Asia and Africa. To promote this kind of activities as a startup Google has recently launched „Google Apps Supporting Program"s for the University of Ghana [1] and

promoting the usage of Google products in the field of education. Cynthia Chiong & Carly Shuler carried out a research on usage of electronic gadgets for young children with mobile apps and they have recommended that preschool and elementary school children may soon be using electronic gadgets seamlessly, they are start practicing at home and then perhaps in the classroom. Early evidence indicates that children can learn from well-designed educational apps [2]. Jordan Pederaza has suggested in his research on various Google Apps and he has listed out 32 ways to use Google Apps in Higher Education also highlights need to implementing Google Apps in meaningful ways in the Classrooms, Research and other works can increase the efficiency, collaboration and engagement [9].

Karsenti and Fievez demonstrated that introducing the touchpad into education constitutes a necessary risk for schools, that this technological device has considerable cognitive potential, and that it comes with certain challenges [3]. According to the survey conducted by Khaddage (2013), the iPad has captured over 75% of the education market worldwide. In Canada, it accounts for over 90% of the education market [4]. The iPad is also one of the most advanced electronic gadget with noble technologies this devices supports over 300,000 applications specifically designed for education and knowledge development (King & Bass, 2013) [5].

III. EDUCATIONAL APPS WITH ITS FEATURES

Today's classrooms are filled with electronic gadgets and e- resources. In this research, we are going to discuss about various apps which can be used as supplement for today's classroom. There is an availability of apps related to teaching are little more. In this paper, discussions related to various apps are available in the market and most of these apps are from the products of Apple and Google. Numerous surveys and reports have conducted the most commonly used apps by educationalist and students inside the classroom to make their education effective. As an outcome of this the most popularly used electronic gadget on today's Classroom is iPADs with an educational App which can be best used by Teachers and Lecturers to make the Classroom more active and attentive for students. Apps mentioned below are available either in the Google Play store or the Apple''s App Store. In this research the features of following are discussed (a) Blackboard Collaborate (b)

Blackboard Mobile Learning (c) Doceri (d) Dropbox (e) ClassDojo (f) Google class room
a) Blackboard Collaborate
Blackboard Collaborate provides a comprehensive online learning and collaboration platform designed specifically for education. It is helping thousands of higher education, K-12, professional, corporate, and government organizations worldwide deliver a more effective learning experience through blended and mobile learning online collaboration tools. And it will help you open up all-new aspects of real time, or anytime, learning to engage more students and improve outcomes.

As the name goes, this app can be used to create a collaboration platform for creating virtual classrooms, offices and meeting spaces. Using this app we can hold online meetings, teach classes and bring experts in to the classroom. It combines the capability of Wimba (A Virtual Classroom) and Elluminate (A web conferencing program). Collaborative Learning Platform Designed for Education with the features of Web conferencing, Voice Authoring, Mobile Collaboration, Integrations and Instant Messaging services.

Features:

- Content Deliver - To deliver lectures and facilitate collaborative learning activities (just like in a face to face classroom).
- Interaction - Students can also interact with lecturers through VOIP technology.
- Skill Assessment - One can assess the skills of students like creating quizzes
- Electronic Board – One can use and share applications and this can be used as an Electronic Board.
- Levels - Higher education, K-12, professional, corporate, and government organizations

- **Prerequisite**:

Any electronic gadgets (Devices iPhone, iPAD or any android device.) with a Java Web start
b) Blackboard Mobile Learning (BML) Going mobile is one of the most effective ways to instantly enrich teaching, learning, and campus life for everyone, wherever they are. BML provides more power and more opportunities in the hands of students and faculty. Help keep alumni connected to campus and even show off your institution to prospective students and their parents. Everyone will have everything they need right on the mobile devices they already rely on. With Blackboard Mobile solutions, one can implement easy mobile solutions that have

the power to take education farther than ever imagined.

This app brings today's education into the Mobile device, giving students and teachers instant access to their courses, contents and communities anywhere. This app is available in both Google and App Store. Through this App, Lecturers can conduct mock Tests to the students, Grades can be discussed and contents can be shared. It also has a discussion board where students can share their views and post their queries to the Lecturer. Also, student can check their grades in the Assignment or Class Tests. Announcement Tab in the App"s Dashboard will display announcements such as cancellation of a class, Exam Timetables, etc., Also, Blogs and Journals are other useful features of this app.

Features:
- Content - To deliver lectures and facilitate collaborative learning activities
- Customization - Students can also interact with lecturers through VOIP technology.
- Discussions - One can assess the skills of students like creating quizzes
- Grades – One can know the status of the grade in various levels of tests.
- Announcement - This is the place where instructors post their schedules for students
- Blogs – Classmates can read blog posts and interact with each other by posting comments and uploading media as attachments on blogs
- Tests – Students now have the option to take Mobile Tests
- Notifications – Students can now elect to receive automatic, personalized notifications delivered straight to their mobile devices to help them stay informed
- Tasks – Instructors can help students track and manage the progress of various tasks, from turning in homework assignments
- Roster - students can quickly view their entire class list, making organizing study groups a whole lot easier

Prerequisite:
Any electronic gadgets (Devices iPhone, iPAD or any android device.) with android OS.

c) Doceri
Doceri is the professional iPad interactive whiteboard and screencast recorder with sophisticated tools for hand-drawn graphics and built-in remote desktop control. Originally designed for teachers, Doceri is used by creative individuals in myriad roles and professions from education to entertainment. Teachers and lectures can use this app to control the desktop and make the whiteboard interactive.

Useful features of this app.

Features:
- Content - To deliver lectures and facilitate remote desktop control.
- Customization – supports hand written content preparation.
- Share - One can share their materials to students.
- Control - Universal controlling facilities across networks.

- **Prerequisite:**
Any electronic gadgets (Devices iPhone, iPAD or any android device.) with windows or android OS.

d) Dropbox
Dropbox is a cloud based service offers users an online backup service, free file syncing, and the ability to share their files with others. It will allow you to access your stored files on a Mac, PC, and Linux computer, or on the go with a mobile app for the iPhone, iPad and Android devices. Changes to specific files are backed up online, and can be accessed from any computer with internet access.

Lecturers and students can use this app to share their files which can be access on or off campus. Students can share their project which is of heavy file size through dropbox and this overcomes the email limitations. Using this app, teachers and lecturers can assign assignments, homework to their students with a Timestamp and also it can be used to share the slides or handouts.

Features:
- Content – supports content creation and modification.
- Access – allows us to access anywhere any time.
- Share - One can share their materials to anyone.
- Cloud space - Universal controlling facilities across networks with free cloud space.

Prerequisite:
- Any electronic gadgets (Devices iPhone, iPAD or any android device.) with internet or WI- FI access .

e) ClassDojo
ClassDojo is the alternate classroom management tool and its performance trackers

like gold-star charts, with positive feedback and parent communication etc. ClassDojo helps lecturers and students to build specific positive behaviors like persistence, curiosity and teamwork at educational institute. Lecturer can create a class in this app with the list of students. Attendance can be marked, real-time feedback can be given and the same can be shared with the parents to know the performance of their Son/ Daughter. This app allows text based messaging between a lecturer and a parent, the app also supports sending photo and voice notes.

Features:
- Content – supports content creation and modification.
- Feedback – allows us to access feedback of specific session.
- Share - Teachers can share their views regards wards to their parents .
- Live – parents can watch their wards what they are doing in class room live.

- **Prerequisite**:

Any electronic gadgets (Devices iPhone, iPAD or any android device.) with internet or WI- FI access.

f) Google Class room

Classroom is available to anyone with Google Apps for Education, a free suite of productivity tools including Gmail, Drive and Docs. Classroom is designed to help teachers create and collect assignments paperlessly, including time-saving features like the ability to automatically make a copy of a Google Document for each student. It also creates Drive folders for each assignment and for each student to help keep everyone organized. Students can keep track of what's due on the Assignments page and begin working with just a click. Teachers can quickly see who has or hasn't completed the work, and provide direct, real-time feedback and grades right in Classroom.

Features:
- Content – Facilities to create deliver lectures and facilitate collaborative learning activities through google docs, slides etc.
- Customization - Students can also interact with lecturers during sessions.
- Discussions - One can assess the skills of students like creating quizzes, tests etc.
- Announcement - This is the place where instructors post their schedules for students
- Blogs – Classmates can read blog posts and interact with each other by

posting comments and uploading media as attachments on blogs
- Tests – Students now have the option to take Mobile Tests
- Notifications – Students can now elect to receive automatic, personalized notifications delivered straight to their mobile devices to help them stay informed
- Assignments – Instructors can help students track and manage the progress of various tasks, from turning in homework assignment.

Prerequisite:
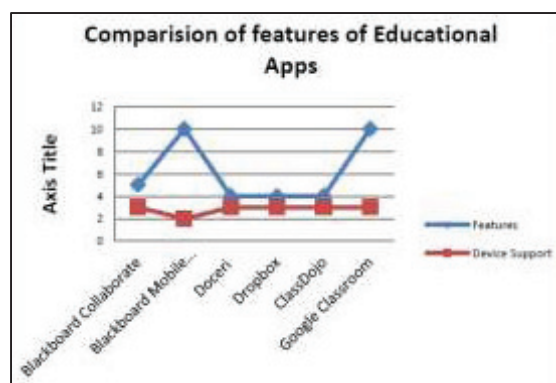Any electronic gadgets (Devices iPhone, iPAD or any android device.) with internet or WI- FI access.

Chart 1: Graphical representation for table 1

Table 1. Comparison of Education Apps with its features

| S.No. | Name of the App's | Features (in no's) (10) | Descriptions | |
			Prerequisite	Device Support
1.	Blackboard Collaborate	5	Java Web start	Desktop, iPAD, Mobiles
2.	Blackboard Mobile learning	10	Android OS	iPAD, Mobiles
3.	Doceri	4	Android OS	Desktop, iPAD, Mobiles
4.	Dropbox	4	Internet or WI- FI access	Desktop, iPAD, Mobiles
5.	ClassDojo	4	Internet or WI- FI access	Desktop, iPAD, Mobiles
6.	Google Classroom	10	Internet or WI- FI access	Desktop, iPAD, Mobiles

In the above table comparison of various apps with is feature sets, prerequisite and device support is discussed. Whereas feature sets are concerned the standard features are recommended for an education tool. Device support is concerned with devices are capable of access these apps and Prerequisite is

concerned with any dependents are required to access these tools and same may be represented in the form of chart.

V. APPS USAGE IN THE CLASS ROOMS

Globally several universities across the world have started using electronic gadgets in and out of the classrooms. United States is not the only place where iPADS are becoming a common sight in college classrooms. Most of the places in United Arab Emirates (UAE), iPADS are also playing a significant role in higher education. In September 2012, the UAE‟s Higher Colleges of Technology sighed an Memorandum of Understanding with Apple that all the school‟s campuses are rely only on iPADS for note-taking and information management [6].

Kabarak University, located just outside Nakuru, Kenya, uses Google Apps to help students make their voices heard. Students now use Google Forms to share their comments with administrators about all aspects of university life. The university also created a Google Site to centralize information like term dates, campus news and sporting events. Some lecturers have created their own Sites to store class resources and lessons in google [8]. At an outset the education field needs lots of changes in their traditional classroom teaching methods and its expecting the introduction of electronic gadgets inside class rooms.

VI. PROBLEMS AND CHALLENGES

Brining Educational Apps into Todays classroom also comes with various problems and challenges, below mentioned are few of the problems that makes every school to think twice before implementing this initiative.

1. Cost:

Not all Education Apps are free hence schools may not support with enough funds. Developed countries like US, UK or Middle East are promoting this creative learning but this is not the case in Under Developed or Developing countries in Asia and Africa.

2. Monitoring Difficulties:

It's an old school of thought that the advancement in technology brings more cons than pros to a student by exposing him to unwanted things. But, to an extent it's true. Students will be distracted easily due to the raging social media sites and monitoring them during classrooms is tedious.

Reading a Book or Handwrite

As much as Google made life easier, it has also made people dependent in thinking. Earlier days people read a lot of books and write articles which increased their independent thinking ability, But now, people are more dependent on Google or other search engines. Cursive writing has demised due to the TABLETS and QWERTY KEYPAD Mobiles.

Skilled Teachers

The proposed learning curve doesn't just apply to students. Not every teacher has the technical knowledge to quickly adapt to a new method of teaching. Switching from a Traditional way of teaching to modern way of teaching requires a lot of training for the teachers which will take a lot of time and money to implement.

In future, Universities or Schools should find a way to overcome these challenges to implement the modern way of teaching successfully.

VI. CONCLUSION AND RECOMMENDATIONS

Tertiary institutions should bring a revolutionary change in the Educational System by promoting Flipped Classroom model whereby students will learn their lessons through video materials or other online materials by their own and discuss the same with their mates to find a solution. This will increase their problem solving skill and team building skills. Flipped classroom model also allows every student to learn in their own pace. Lecturers in today's classroom should engage the students and expose the students to the new technologies which can move them away from a traditional classroom method.

Though developed countries have already implemented the new method of teaching, Countries in Asia and Africa should also find a means of exposing students and classrooms to these Modern methods. Under Developed or Developing countries should make use of the initiatives introduced by Google and Apple to create a modern classroom.

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