

**ANDROID APPLICATIONS FOR E-ASSESSMENT**

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**Abstract**

This article aims to outline recent trends in educational assessment with android applications in the classroom. Every year the use of mobile devices like tablets and smartphones increases. At the same time, android applications are being developed to meet the demand based on the current situation. It is therefore essential that educators investigate current developments in assessment practices used in the classroom. Electronic assessment is the use of technology to manage and deliver assessment. This article discusses the features of android applications for e-assessment and the important of mobile applications used in classrooms. The article highlights some of the android apps like Nearpod, A+ spelling test, GoClass, Socrative, MyClassTalk, Edmodo, Kahoot, Recap and Padlet for the e-assessment. This article explains different strategies used in e-assessment and how android applications helps teachers and students in the assessment process.

**Key words:** android applications, e- assessment

**E-Assessment**

Every year the use of mobile devices like tablets and smartphones increases. At the same time, android applications are being developed to meet this demand. It is therefore essential that educators investigate current developments in assessment practices and use as an motivational technological medium that can possibly be used in the classroom. These applications can be used both as a source of information as well as a tool for creating material. Electronic assessment, also known as e-assessment, online assessment, computer assisted/mediated assessment and computer-based assessment, is the use of information technology in various forms of assessment such as educational assessment, health assessment, psychiatric assessment, and psychological assessment. This may utilize an online computer connected to a network. This definition embraces a wide range of student activity ranging from the use of a word processor to on-screen testing. Specific types of e-assessment include multiple choice, online/electronic submission, computerized adaptive testing and computerized classification testing. E-Assessment is the use of technology to manage and deliver assessment. This assessment itself could be diagnostic, formative, or summative. The content can vary: from an online multiple choice quiz to a peer-assessment exercise in which students are required to assess each other's work. Some of the most widely-used forms of e-assessment are:

- online tests, quizzes, and exams
- e-submission and e-marking
- self- and peer-assessment
- student response systems

Different types of online assessments contain elements of one or more of the following components, depending on the assessment's purpose: formative, diagnostic, or summative. Instant and detailed feedback may (or may not) be enabled. In education assessment, large-scale examining bodies find the journey from traditional paper-based exam assessment to fully electronic assessment a long one. Practical considerations such as having the necessary IT hardware to enable large numbers of student to sit an electronic examination at the same time, as well as the need to ensure a stringent level of security are among the concerns that need to resolve to accomplish this transition. E-marking is one way that many exam assessment and awarding bodies, such as Cambridge International Examinations, are utilizing innovations in technology to expedite the marking of examinations. In some cases, e-marking can be combined with electronic examinations, whilst in other cases students will still handwrite their exams with papers scanned in securely and uploaded into an e-marking system.

### **Importance of e-assessment**

Assessment is an integral part of instruction, as it determines whether or not the goals of education are being met. Assessment affects decisions about grades, placement, advancement, instructional needs, curriculum, and, in some cases, funding. Assessment inspire us to ask these hard questions: Are we teaching what we think we are teaching? Are students learning what they are supposed to be learning?, Is there a way to teach the subject better, thereby promoting better learning?

Today's students need to know not only the basic reading and arithmetic skills, but also skills that will allow them to face a world that is continually changing. They must be able to think critically, to analyse, and to make inferences. Changes in the skills base and knowledge our students need require new learning goals; these new learning goals change the relationship between assessment and instruction. Teachers need to take an active role in making decisions about the purpose of assessment and the content that is being assessed. Supply immediate and focused feedback on students work, Allow students more than one attempt to answer, Present questions in a predetermined or random order, Be used for diagnostic, formative or summative assessment, Guides students to further readings or resources if they are having difficulty, Increase students digital literacy, Increase students engagement, Record highly detailed student learning analytics and present them to the lecture in real time and Manage lecturer work load and corrections.

### **Android Applications for Education**

The widely use of mobile devices in all spheres of life is common especially smartphones. For all needs we have many mobile apps are available. For education purpose also the android apps were used. There are a number of android apps available for class room activities like teaching, learning, assessment and professional development. The use of android application for education process may increase the motivation of students and gives continuous feedback to teacher and learner. In this digital era every student has atleast one mobile device in hand and can be used in a productive way. There are many android apps used for education such as kahoot, socrative, Ted-Ed, Edmodo, Nearpod, recap, padlet etc.

## **Android Applications for e-assessment**

### **Nearpod**

Nearpod is a presentation software tool that provides access to students on their individual computers and devices. As teacher build Nearpod presentation with content, can embed open-ended and multiple-choice questions throughout the presentation to check for understanding along the way. The teacher can control the pace of the presentation, or set it up in homework mode to allow students to work through it at their own pace. The teacher dashboard is easy to access and provides all of the analytics and reports you will need. The best feature of Nearpod is that it allows teachers to manage content on their students' devices. Here's how it works: First the teacher shares content with their students, through materials, lecture and/or presentation. This content is then received by the students on their devices, and they are able to participate in activities. Then teachers are able to access students in real time by seeing the students answers and having access to post-session activity reports. This is by far one of the best assessment apps out on the market today.

### **A + Spelling Tests**

The A+ Spelling Tests app is for all elementary classrooms. Students can practice their spelling words, while teachers can track how they are doing. Next to each spelling test, students and teachers can see their results. Other great features include the ability to instantly see if you are right or wrong, unscramble mode to help sharpen spelling skills, and the ability to submit tests through email.

### **GoClass**

The GoClass app is a free application that allows users to create lessons and share them with their students. Documents can be broadcasted through student devices and/or by projector or TV. GoClass allows users to formulate questions, draw diagrams, and share materials with students in class. Teachers can also keep track of what students are using which lessons, and when they are using them. To check for student understanding, the teacher can post a question or poll and get immediate feedback. This will help the instructor tailor his/her lessons to make sure all students are understanding the concept that is being taught.

### **Socrative:**

Socrative is a quick and easy formative assessment tool. The teacher can use Quick Questions for on-the-fly checking for understanding or create polls, questions (multiple-choice, true/false, and short-answer), exit tickets, and even a fun space race. Results are available in real time through a live results table. Quizzes can also easily be shared with colleagues for use in their classroom.

### **MyClassTalk**

MyClassTalk was designed to assess students participation in the classroom. With just a tap of finger teacher can easily award points and rank students class participation. Teachers can even upload students photographs for an even better visual. Forget about writing names on the board for not participating, this easy to use app is all you need.

### **Edmodo**

This is a useful app for assigning quizzes and collecting homework. Edmodo allows the discussions to continue even after school bell rings. Teachers and students can share content and use apps as a channel for new information or notifications, submitting assignments and receiving grades in the process. The ability for teachers to post assignments, messages polls and quizzes while providing access to relevant resources and calendars is simply invaluable.

### **Recap**

Recap is a new and different way to not only monitor student learning, but also to build toward it through questioning that taps into student curiosity. It is a Q&A platform where students demonstrate their understanding with a video response. Recap has recently released Recap 2.0, which builds in a process for teachers and students to ask and respond to questions through the “Queue,” engage and learn through the teacher-created “Journey,” and demonstrate their understanding with a video response.

### **Kahoot :**

kahoot is a student response app with its lively game-like interface. You simply add multiple-choice questions on the website, or choose from the already created quizzes, and give students the game PIN. Teachers can even add videos, images, and diagrams to their questions. The students will be fully engaged as you present the quiz questions and they race to not only get the answer correct, but get it in first.

### **Padlet:**

Padlet is an electronic bulletin board where teacher and students can upload documents, text, videos, images, and so much more. Padlet has colorful background options and layouts to help organize content. There are so many ways to use a Padlet wall—it’s the perfect way to allow students a choice in how they demonstrate their knowledge, all collected in one easily accessible place.

### **Blackboard**

This American software company designed the Blackboard VLE. Already widely used across the sector, Blackboard has the capability to create quizzes and online tests, low-stake assessments, and also collect student work. Blackboard also enables institutions to create student surveys, which could be used as a vehicle for student feedback on issues such as how they feel their course is progressing. More information can be found on the Blackboard website: [www.blackboard.com](http://www.blackboard.com)

### **Strategies to Implement Android Applications for the e-Assessment**

The delivery of e assessment for students can vary. Some of the most popular methods of delivering e assessment are discussed below

#### **Virtual Learning Environments**

The vast majority of universities now have virtual learning environments (VLEs). These are usually used by students to access course resources, check timetables and assignment marks, and contact other students and academics. VLEs can also serve a very useful assessment and feedback purpose.

**Egs. Black Board, Moodle.**

### **E-portfolios**

An e-portfolio is a collection of electronic evidence assembled and managed by a student. In much the same way as a traditional portfolio of work, it consists of a number of different pieces collated throughout a module or course, which is then assessed as a whole. Already popular in further education, e-portfolios are beginning to be used by some courses at the higher education level. They are particularly relevant to students on more vocational courses, where essay writing or written tests are rarely used. E-portfolios can be highly cost-effective, as they can reduce material costs. They can also make it easier for students to keep a record of their work in a secure environment, where they are able to draw on it at a later date. From a staff perspective, e-portfolios allow for easier monitoring of student progress throughout a course or module. Additionally, having a large collection of students work from the same course helps lecturers to identify areas which may need greater attention.

**Egs. Paperfree, Eportfolio, PebblePad,**

### **Benefits of android applications for e-assessment**

- E-Assessment covers a wide range of activities so can have a wide range of benefits. The advantages of e-assessment can include:
- Immediate feedback, tailored to help students improve their knowledge and performance
- Access for students in different geographical locations and at different times
- Allowing learners to refine the exercise or identify areas in which more instruction is needed
- Students undertake online tests many times to assess and re-assess their knowledge
- Mobile devices have encouraged independent learning making it easy for teachers to differentiate individual student needs and share resources with students and among each other.
- Android apps helps to increased interest, creativity, enthusiasm, engagement, motivation, independence and self-regulation, and improved productivity in students.
- Doing activities and discussions facilitated by the mobile device, students find learning more fun as compared to a typical lecture-based classroom.
- The relationship in teaching and learning in the classroom changes and becomes more student centred and student friendly allowing for more creativity of the student.
- The numerous android apps available allow students to work independently, in groups and as part of the whole class, developing a range of knowledge and skills.
- Teachers can create interactive presentations, which include student's observations and comments.
- Teachers can give lessons, monitor progress and stay organized.
- Simple-to-use and easy to create presentations with stunning animations and effects.
- Students can track their assignments, take notes, and study for finals using the notes. Teachers could engage students in online discussion by linking all computers.
- The students can then take part in the discussion by writing on the screen.

- The mobile devices have the capacity to connect student and instructor and create more active discussions and more constructive reflection that includes teacher-teacher, student-student, teacher-student, and student- teacher, what they are discovering is possible with the device.
- With a device, the classroom is always at the students and teachers fingertips with thousands of educational apps available to download.

### **Challenges of android application for e assessment**

The existing process needs to be reviewed and new methods may have to be implemented to be used in classrooms. The approach of throwing these devices into classrooms to see what happens is bad and definitely will have negative consequences. Although the students are in favour of mobile devices, they too have concerns. However, there are some concerns on the use of mobile devices in education raised by students, teachers and parents, which are discussed below.

Children spend most of their time playing games and watching movies and it has become a sedentary past time.

Even if the developing countries introduced digital technology in educational institutions, it is only limited to urban regions while the rural and poor people continue to lag behind, due to lack of investment, infrastructure and skilled teachers.

It is observed that the students find it easier to use gaming applications than education apps.

Mobile devices when used incorrectly by students in classroom can be a source of distraction.

Parents do not trust that their young children were responsible in their use and felt possible danger.

### **Advantages for Students**

- Online assessments can give students instant feedback, unlike paper examinations in a traditional classroom learning session.
- Automated online assessments give students the option of taking practice tests whenever you want.
- Some assessments are Internet-based, which allows the student to take the test at home or anywhere else he likes.
- Advantages for Teachers
- Teachers can distribute multiple versions of the exams and assignments without having to manually monitor which students got which tests. This cuts down on cheating.
- Electronic assessments allow teachers to quickly evaluate the performance for the group against the individual.
- Report-generating capabilities help teachers identify learning problem areas for the group and individual students.
- Online assessments take up less storage space in respect to keeping records than paper. All data can be stored on a single server.
- Teachers can mix and match the question styles on exams, including graphics and make them more interactive than paper exams.
- Eliminates human error in grading.

**Disadvantages for Students**

- Answers on online assessments can only be right or wrong.
- There is no room for explaining your answer or getting partial credit. For example, in a geometry or calculus exams on paper, a teacher can see how student worked out the equation. Teacher can identify where student went wrong to come up with the wrong answer. In this case, he can give student partial credit.
- Online assessments do not give teachers the options to see your line of thinking to get to your answer.

**Disadvantages for Teachers**

- Technology is not always reliable. Information can be lost if a system breaks down.
- In some cases, teachers need some technical expertise to create exams.
- The costs to set up an electronic assessment system in a learning institution or business training environment can cost thousands, even tens of thousands.
- Testing online is not suitable for essay writing and analysis or cognitive thinking testing.
- Final thoughts

Online assessment is used primarily to measure cognitive abilities, demonstrating what has been learned after a particular educational event has occurred, such as the end of an instructional unit or chapter. When assessing practical abilities or to demonstrate learning that has occurred over a longer period of time an online portfolio (or e-Portfolio) is often used. The first element that must be prepared when teaching an online course is assessment. Assessment is used to determine if learning is happening, to what extent and if changes need to be made. The use of android devices in our society is common, everybody consists of smartphones or mobile devices. People use android applications for their daily life events, so for educational process also done using these android applications. It will help to create a student's motivation towards learning. The most important process of education is assessment. Use of android apps in assessing student's performance helps both teachers and learners.

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