Smart use of smartphones in learning

Ms. Debarshita Biswas
Asst. Professor
The ICFAI University,
Tripura

Abstract: This paper is a study about the use of smartphones in education. How smart phones are capable of creating a learning environment with the distinct features & facilitate the students with their studies in a easy way. No one can avoid the fact that its fun to use an attractive devices like smart phones for study purposes. Smartphones are location independent, light weight, colorful, very much visual & dynamic study material, which actually attract a student. Several educational apps are providing a very smart way to go through the basics of any random topic in the field of engineering, history, English, physics, biology etc. Other than that spoken English, personality development, interview assistance etc apps are very useful for a job seeking candidate. If the smartphone can be used smartly by a teacher in a classroom then it can bring a revolution in the way of teaching & learning.

Keywords: Smartphones, education, location independent, classroom, apps.

Smartphone & its history

Smartphone is a handheld device that allows people to make phone calls as well as use other features that are not common on a conventional phone.

Before smartphones, there were only cell phones and personal digital assistants (PDAs). Cell phones were for calls and text messages; PDAs can keep contact information & create to-do lists. They could also sync with a computer. As technology progressed, PDAs acquired the ability to connect wirelessly and to send and receive e-mail. As time passed, PDAs gained cell phone features while cell phones became more like PDAs to the point of almost turning into small computers; the beginning of smartphones. The first, most successful smartphone was the BlackBerry. Research In Motion was the first company to introduce different versions of the smartphone to the public. More firms joined them, like Motorola, Sony and Nokia. Although Research In Motion was the pioneer, it was Sony that first introduced the smartphone closest to what we know today. Sony was able to do so with the help of PALM Corporation, the firm that was known for making portable computers and PDAs. The Sony PCS phone was developed with PALM software. Users were able to access their personal information manager data and make and receive calls and text messages.

Smartphones have become part of contemporary culture. It was in the early 2000s when Apple, Inc. developed the first iPhone with Sony. This caused a new surge for a higher-level smartphone with more and better functionality while maintaining ease of use and wide access.

Smart features of smartphone:

Operating System:

In general, a smartphone will be based on an operating system that allows it to run applications. Apple's iPhone runs the iOS, and BlackBerry smartphones run theBlackBerry OS. Other devices run Google's Android OS, HP's webOS, and Microsoft's Windows Phone.

Apps:

While almost all cell phones include some sort of software (even the most basic models these days include an address book or some sort of contact manager, for example), a smartphone will have the ability to do more. It may allow you to create and edit Microsoft Office documents--or at least view the files. It may allow you to download apps, such as personal and business finance managers, handy personal assistants, or, well, almost anything. Or it may allow you to edit photos, get]driving directions via GPS, and create a playlist of digital tunes.

Web Access:

More smartphones can access the Web at higher speeds, thanks to the growth of 4G and 3G data networks, as well as the addition of Wi-Fi support to many handsets. Still, while not all smartphones offer high-speed Web access, they all offer some sort of access. You can use your smartphone to browse your favorite sites.

Keyboard:

By our definition, a smartphone includes a QWERTY keyboard. This means that the keys are laid out in the same manner they would be on your computer keyboard--not in alphabetical order on top of a numeric keypad, where you have to tap the number 1 to enter an A, B, or C. The keyboard can be hardware (physical keys that you type on) or software (on a touch screen, like you'll find on the iPhone).

Messaging: All cell phones can send and receive text messages, but what sets a smartphone apart is its handling of e-mail. A smartphone can sync with your personal and, most likely, your professional e-mail account. Some smartphones can support multiple e-mail accounts. Others include access to the popular instant messaging services, like AOL's AIM and Yahoo! Messenger.

These are just some of the features that make a smartphone smart. The technology surrounding smartphones and cell phones is constantly changing, though.

Some Skills Students can develop By using Smartphones

Smartphones foster a number of concrete skills in children and young adults, especially with the study part. So let's look into some of them:

Context-awareness – learning at locations

All the location-based technologies implemented in mobile phones allow students to easily access additional information on their environment, effectively learning more about the world they live in. Learning about the history or geography of a certain location while actually being right there at that moment can deepen their engagement with the subject and provide a more long-lasting fascination with it. Studies show that learning about the "middle ages" while playing a mobile game actually improves

the knowledge transfer when compared to traditional learning in a classroom.

(Re)search and informational skills
The ability to access the knowledge repository that is the internet from any point in the world is making smartphones the ultimate source of information. However, the processes of searching for and discovering the "right" information depend on a set of skills which is arguably of most crucial value in modern society.

Literacy and reading
When young people first got their hands on mobile phones, they gave life to the texting jargon that was deemed to have "destroyed literacy". However, studies show that the kind of increased exposure to mass media that smartphones provide, can actually help to increase literacy. Furthermore, despite the relatively small screen sizes, smartphones are often used for reading on the go.

Social and collaborative skills

The networking capabilities of internet-enabled mobile phones allow for a great deal of social learning. Educational platforms that provide ways for students to collaborate and compete by using game mechanics are an excellent tool for adding excitement to the subject of study. Multiplayer games develop important collaboration and teamwork skills – another critically valuable asset in the modern world.

Technical and "new media" skills
Operating a smartphone, of course, inevitably develops a knowledge of how software interfaces work. The current generation of young people is believed to be inherently tech-savvy, but familiarity with electronics and new media requires cultivation and continuous engagement. By using portable devices for various purposes, a student's understanding of the capabilities of computing increases, and in some cases can lead to pushing those capabilities and pursuing innovation.

Smartphones in the Classroom (Teacher's view)

First give information about the educational apps to the students & allow them to use those during interactive & tutorial sessions.

Take sudden presentation
- Tell the students to prepare themselves for a quick presentation with the going on & future topic & allow them to get information through web.

Convert your class to an interactive session
- Allow the students to interact with each other & with you through we chat. But only learning contents are allowed.keep a eye on them. Those who are always silent, they will also talk through text.

-
Use Smartphones to Collaborate
- Write an article about some topic & post it in FB(in a separate account) & tell students to comment on it about their queries they have.
- Whatsapp allows sharing of image, files etc. Allow students to use it in class but in a specified period of time.
- Have students peer-assess their classmates' essays through a **Google Form** embedded on teacher page, and allow them to view real-time constructive criticism. Afterwards, polish up the spreadsheet and share with students. Believe me, they will be interested. Click **here** to see how successful this strategy can be.
- Allow texting in class to peer-edit and offer constructive criticism for writing projects. Just imagine students sharing

thesis statements and introductory paragraphs without ever saying a word. This is just one of the strategies we use to create a quiet and successful writing atmosphere.

- Engage readers in real-time as they work through the assigned reading by collaborating with their peers via a **Twitter hashtag** or **Wallwisher.com**.

Use Smartphones to Communicate

- Allow students to read from their smartphones.
- Allow students to video or audio record your assignment instructions.
- View student exemplary products from school YouTube channel.
- Use a Twitter hashtag to augment the in-class lesson or extend the conversation after class. Click here to read about a tri-state conversation about a Presidential debate.
- Establish a Twitter class account to share class assignments and reminders. If students do not want a Twitter account, make it easy. Embed the Twitter feed on your teacher page.
- Send students reminders in-class/after-class through ClassParrot
- Have students assess the teacher through a Google Form.
- Use Google Translate to break down language barriers.
- Use Instagram or Twitter to advertise class projects.

Use Smartphones to Create

- Write with apps such as My Writing Spot and Evernote.

- Set up a portable writing station by connecting a keyboard to smartphone via Bluetooth.
- Use dictionary and thesaurus apps.

Use Smartphones to Coordinate

- Save time and paper by accessing documents on teacher's website.
- Share spreadsheets of notes with Google Drive.
- Get to know your students by having them complete a Google Form.
- Research key sites to bolster students' projects.
- Manage students' knowledge of current lessons by having them take a quiz directly from their smartphones via Secretive.
- Allow students to check their grades via on-line gradebook or learning platform.
- Use the calculator app to calculate scores during gamified learning structures.
- Use the stopwatch and timer apps to manage class time.

Conclusion: Smartphone are very useful due to their light weight, less price(compared to other electronic gadgets), web access, good speed, super cool apps, ease of use, mobility etc. But the teacher should make a boundary in the use of these handheld devices in classrooms & parents also should intervene time to time to see how & what their children are studying.

Learning could be really fun & interactive with the smart & calculative use of smartphones.
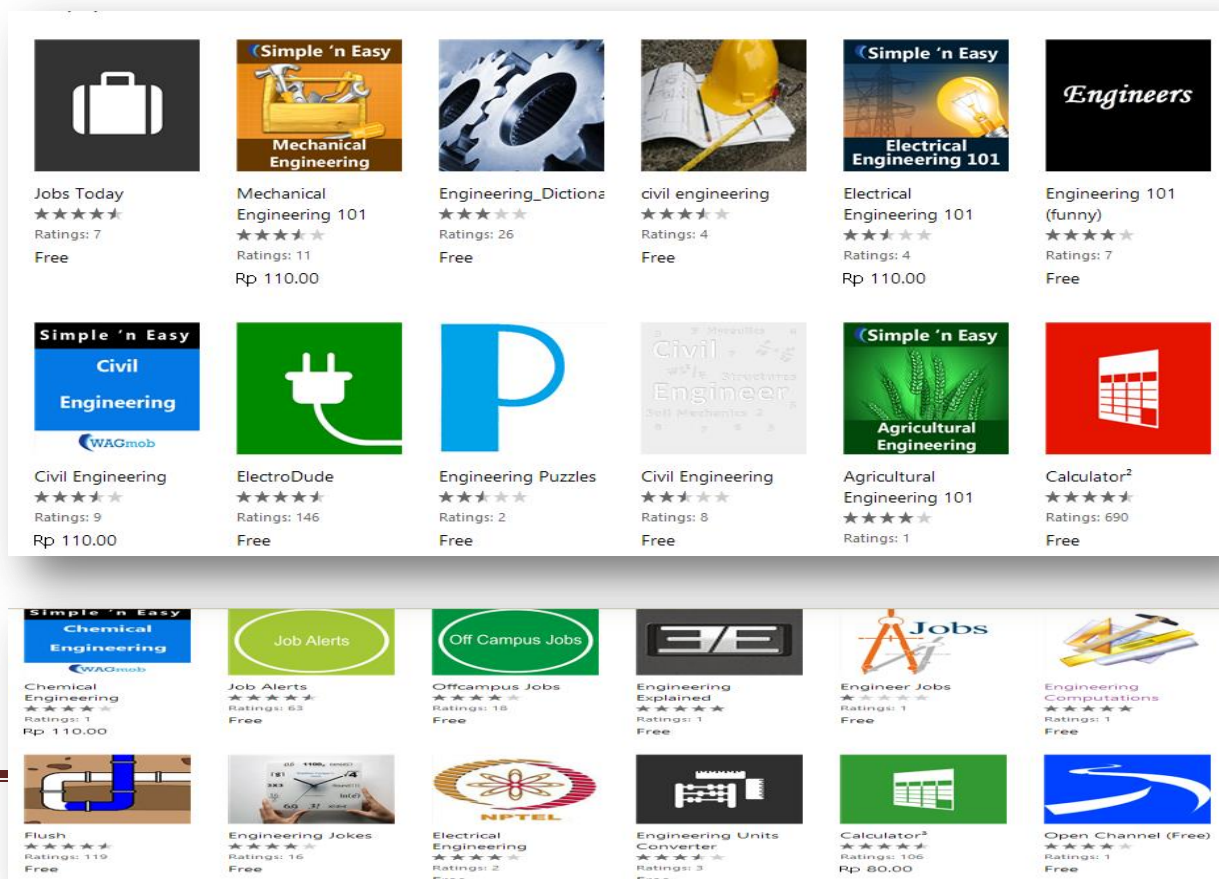
Examples of educational apps in android phone are given below

Examples of educational apps in windows phone are given below

References:

1. www.google.co.in

2. *en.wikipedia.org/wiki/**Smartphone***

3. http://www.windowsphone.com

4. http://cellphones.about.com

5. http://www.techopedia.com/definition/2977/smartphone

6. https://play.google.com/store/search?q=computer%20science%20apps&c=apps