EFFICIENT MOBILE APPLICATIONS: AN INFORMATION EXPLORER

Ruchi

Department of Library and Information Science, University of Delhi, Delhi, (India)

ABSTRACT

Nowadays mobile learning or m-learning is an important object of discussion and have got special attention in the present era of communication. Academicians are showing their interest in online learning. With the advent of social media, online social networking has made very popular to the android phones and mobile applications learning via mobile. In this series Apple's App Store, Google Play, Windows Phone Store and BlackBerry App World have created apps which are freely available. The mobile applications and its tremendous use are still relatively new. But huge demand of these technologies is being seen. This paper covers different type of mobile applications which helps students in their studies and to explore their knowledge. The applications covered in this article are the reading apps, apps for kids, apps for learning mathematics, and few other important apps.

*Keywords***:** *Android, communication, Mobile, Mobile Applications, Mobile Learning,*

I. INTRODUCTION

In 19th century mobile was used as a tool for only voice call. Mobile phones have really changed the ways of communication. It provides us an easy and fast way of communication. Wherever you go, whenever you want, your phone will stay you connected with all. But they are not only limited to communication purposes. A research conducted by Pew research shows that the ownership of mobile phone in US has increased from 35% in 2011 to 58% in 2015 and that of Tablet from 8% in 2011 to 42% in 2015 (www.pewinternet.org/data-trend/mobile/device-ownership/).

According to **Tim Berners Lee** (The Founder of Internet) "The web of the future will be accessible from a growing diversity networks … and will be available on an ever increasing number of different types of devices". The Internet is one of the biggest blessings to mankind. The new generation people are very much attracted toward, social networking, web based resources and digital resources. New technologies in mobile phones are very useful for students if used for learning.

A new study conducted by TRU (a global leader in youth research) provides a body of research which supports the idea that **students use cell phones to learn**. This is the first survey of its kind. It reveals that middle school students are using mobile apps that are actually helping kids in learning mathematics and science better, and increasing their confidence. As of June 2014, more than 75 billion mobile apps had been downloaded from the Apple App Store. There may be many important queries related to m-learning.

II. WHAT ARE MOBILE APPS?

Mobile apps are software applications which are designed to run on smartphones, tablet computers and other mobile devices.

III. HOW TO USE THESE APPS IN OUR MOBILE?

For using a mobile app you need a smart phone/ mobile device with internet connectivity. The Android, Microsoft, Apple and BlackBerry mobile operating systems have app stores online where one can download, and install apps. One can use an app store that works with operating system of the mobile. The most popular operating system stores named are Apple's App Store, Windows Phone Store, Google Play, and BlackBerry App World.

IV. WHO DESIGN THESE MOBILE APPLICATIONS?

Mobile application stores such as Apple's App Store and Google's Android Market have created apps which are freely available. From all the applications mostly are freely available while few are paid.

V. WHY DO WE NEED A MOBILE TECHNOLOGY?

- Mobile phones aren't just phones any more, they can access e-mail, search the Web, video chat, and play games. Even mobile devices made it possible to access resources into the palm of your hand.
- Mobile phones are used as a tool for advancing education. In this technology age the trend of mobile learning is popular.
- They are freely available through app stores which are operated by the owners of the mobile operating system.

VI. MOBILE APPLICATIONS FOR LEARNING

Various apps for mobiles have been available in the market. Academicians and students are appreciating and using apps to support their learning. These apps are designed for all age groups i.e, toddlers to adults to old age persons. Next, we provide some mobile apps which are useful for learning for everyone kids, students, academicians and for the peoples with some other purpose.

VII. READING APPLICATIONS

- **The free book app**
  The Free Books app provides 23,469 classic titles and allows for highlighting, dictionary support, and bookmarks.
- **Good reader**
  The Good Reader application is called Good Reader 4 is an academic tool and e-reading apps. It allows you to access scholarly articles and other documents which you can save them to your mobile device.
- **Book viser**
  This application is designed for Windows-based mobile devices and is used to browse and read books.
- **Freda+**

International Journal of Electrical and Electronics Engineers
Vol. No.7 Issue 02, July-December 2015
www.arresearchpublication.com

Freda+ is a customizable reading application that allows you to change in font and color, and it accepts text formats like EPUB, HTML, TXT, and FB2.

VIII. MOBILE APPLICATIONS FOR KIDS

- **Brain Exercise**

  This is a free app having a set of smart games that helps you to improve your Math skills (basics).

- **Kids Numbers and Math Lite**

  This is an app that is designed for preschoolers to improve their math skills.

- **First Words - Action Words for Toddlers and Preschool Children**

  This app is part of a new series from Kizzu which helps children to learn.

- **Pick a Pair - Memory card games for children**

  Pick a Pair is a memory game for kids helps them to learn words from dictionary while having fun.

- **SketchPad Safari - Learn to Draw Step by Step**

  Take an artistic app of the animal kingdom which helps you to learn various type of drawing.

- **100 People - for Babies & Toddlers**

  This app is a speech and vocabulary learning game for preschool children of age between 6 months and 4 years old.

- **JiGi's Jigsaw - World Journey**

  This app is filled with a variety of animals which test your puzzle solving skills. It is made for kids aged 5 to 10 years old.

IX. MATHEMATICS MOBILE APPLICATIONS

9.1 Math 4 Mobile

Math4Mobile is a mobile application specially made for educational purpose. It is a personal technology used for teaching and learning on your mobile. This app has 5 Java (J2ME) applications that help you to learn mathematical using your mobile phone. This app is free and it can be downloaded online using the Live Demo page. You can try this app online or download to your mobile phone.

X. 5 JAVA (J2ME) APPLICATIONS OF MATH4MOBILE

- **Graph2Go** 0.84

  This is a graphing calculator which operates for sets of function expressions.

- **Solve2Go** 0.84

  This app supports solving equations and inequalities conjectures. Conjectures can be refuted and supported by several examples.

- **Quad2Go 0.84**

  This is a tool for learning about quadrilaterals with the help of suitable examples.

- **Sketch2Go 0.84**

  This is a qualitative graphing tool. Graphs are sketched for representing constant, increasing, and decreasing functions.

- **Fit2Go 0.84**

  This is a linear, quadratic function graphing tool and curve fitter. Users can view a phenomenon, conduct experiments, identify variables and take measurements for constructing models.

- **WolframAlpha**

  WolframAlphais developed by Stephen Wolfram. This app gives you access to the WolframAlpha computational knowledge engine. WolframAlpha uses algorithms to compute answers and also generates reports for users.

XI. MOBILE APPS FOR RESEARCH EXPLORATION

- **ISSRN (Social Science Research Network)**

  ISSRNis an important app for those interested in the field of social sciences and humanities. Social Science Research Network (SSRN) is devoted to the rapid worldwide dissemination of scholarly

  research. It provides access to the world's best authors and their research literally at your fingertips.

- **SciFinder Mobile**

  Access the research tool through your smartphone. We can explore by Research Topic, substance ID, author name and company Name. We can also quickly find references to published research on your interesting topics, molecular formula, including nomenclature, and references to published research from a scientist or company. There's no app to download and no IP address restrictions. From Web browser on our smartphone, go to **scifinder.cas.org/mobile** or we can scan the QR code.

XII. FEW OTHER MOBILE APPS

- **Indian History App**

  This app gives you the entire history of India at your fingertips. Remembering number of dates is a very big task. By using this app you need not to remember the dates of Battle of Plassey or the Panipat Wars. The entire history comes to your phone with concise descriptions about all events.

- **Sec-N-Sec**

  Sec-N-Sec is a law mobile software/ application to access certain Indian Bare Acts in mobile.This app contains about 71 important Central Acts (as amended up to 2013 amendments) which can be referred in seconds without any network connection

- **50 languaGES**

  This app permits you to learn multiple languages by using your own native language. This application is free of cost. It is the best app recommended for all the students who are interested in learning a new language.

XIII. MOBILE APPS OF LIBRARY OF CONGRESS, USA

- **BARD Mobile App**

  The National Library Service (NLS) provides mobile app for the Blind and Physically Handicapped. Library of Congress provides access to braille and talking books. BARD contains around 50,000 books, magazines, and music scores in audio and braille formats, and new collections are added daily.

- **Aesop for Children**

  The Aesop for Children interactive book is designed to entertain the readers of every age.The book contains more than 140 classic fables along with beautiful illustrations and interactive animations.

XIV. SOME EXAMPLES OF MOBILE LIBRARY WEB SITES

Some libraries have designed library websites which are accessible through your mobile phones and you can access the online resources, check OPAC and see online lectures videos through your mobile (for example: see Table). You need not to come to library for accessing resources or checking OPAC.

Name of libraries	Mobile websites
National library of India	http://www.nationallibrary.gov.in/
Albertsons Library, Boise State University	http://library.boisestate.edu/m
Harvard College Library	http://hcl.harward.edu/mobile/versions
University of Illinois Library	http://hades.grainer.uiuc.edu/nikki/mobile/version1
New York University Libraries	http://library.nyu.edu.8000/mobile
North Carolina State University (NCSU) Libraries	http://www.lib.ncsu.edu/m/home/?browse=iphone

XV. CONCLUSION

Mobile applications and its usage are increasing with an alarming rate. This has changed the way of learning. Now, students are not only limited to notes given by teachers, textbooks, waiting for next class for consulting your teachers about any query. You can use these apps for query solving, getting solution for your mathematics problems, understanding any term from any subject, helps toddlers to learn basics of numbers, counting alphabets, colors etc. and helps academicians to learn new ways of learning. There are a lot of advantages of these learning apps which are specially designed for the learning communities of the society. These apps are freely available so anyone can use and enhance their learning skills, improve confidence level. One have to use these apps as you need not to go to library or school, college, home for study, wherever you are use your smart phones and learn.

REFERENCES

[1]. B. Lori, Mobile Technologies for Libraries A List of Mobile Applications and Resources for Development, College & Research Libraries News, 2011, 2015, 222-28.

[2]. D. Furió, M.C. Juan, I. Seguí, and R. Vivó, Mobile learning vs. traditional classroom lessons: a comparative study, Journal of Computer Assisted Learning, 31, 2015, 189–201. doi: 10.1111/jcal.12071

[3]. K. F. Hashim, F. B. Tan, and A. Rashid, Adult learners' intention to adopt mobile learning: A motivational perspective, British Journal of Educational Technology, 46, 2015, 381–390. doi: 10.1111/bjet.12148

[4]. R. Steele, Social Media, Mobile Devices and Sensors: Categorizing New Techniques for Health Communication, 2011 Fifth International Conference on Sensing Technology (ICST), IEEE Explore Digial Library, 2015, 187-92.

[5]. http://www.cas.org/products/scifinder/sf-mobile

[6]. http://www.kizzuapps.com/our-apps/

[7]. http://www.igi-global.com/article/app-experiment-experience-user-studies/58926

[8]. http://www.librarysciencelist.com/25-most-popular-apps-used-by-librarians/

[9]. https://www.learningtechnologyblog.files.wordpress.com/2013/08/gemmalibraryfinal.png

[10]. http://www.learningtechnologyblog.wordpress.com

[11]. http://www.library.upenn.edu/m/.

[12]. http://www.macinchem.org/mobilescience/upvoted/

[13]. http://www.math4mobile.com/

[14]. http://www.mobilex.co.in

[15]. https://www.onguardonline.gov/articles/0018-understanding-mobile-apps

[16]. http://www.solutions.cengage.com/apps/

[17]. http://www.statista.com/topics/1002/mobile-app-usage/

[18]. http://www.topapps.net/android/top-android-apps-for-teachers-or-educators-to-offer-quality-education.html/

[19]. http://www.whatis.techtarget.com/definition/mobile-app