

Why Do Students Use Mobile to Learn?

Wong Chun Hung Hugo*

Youth College, Hong Kong Special Administrative Region, Hong Kong

*Corresponding Author: Wong Chun Hung Hugo, Youth College, Hong Kong Special Administrative Region, Hong Kong, E-mail: hugowong@vtc.edu.hk

Citation: Wong Chun Hung Hugo (2016) Why Do Students Use Mobile to Learn?.Educ E-learn 2: 007.

Copyright: © 2016 Wong Chun Hung Hugo. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted Access, usage, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

This study used the qualitative method to investigate the reason of Guangzhou's university students prefer to use a mobile device to learn. It found that ten reasons for students using a mobile device to learn which are mobility improve learning effectiveness and efficiency, Learner Autonomy, information acquisition, acquire knowledge, enjoyable learning, learning diversification, learning expansibility, cooperative learning and expanding social network. Moreover, this study would like to show some experience for students using a mobile device to learn.

Introduction

Mobile learning is one popular topic for recently discussing. Many scholars investigated students how to use a mobile device to learn [1 - 3]. Quinn [4] defined m-learning as the "intersection of mobile computing and e-learning: accessible resources wherever you are, strong search capabilities, rich interaction, powerful support for effective learning, and performance-based assessment." (p. 8). Traxler [5] believe that mobile learning is going to facilitate a wide variety of teaching methods in future. This study used the qualitative method to investigate the reason of Guangzhou's university students prefer to use a mobile device to learn.

Methods

This study uses focus group interview and individual interview to collect qualitative data. Focus group interviews

provided interaction among interviewees, a collection of extensive data and participation by all individuals in a group [6]. However, the individual interview was often considered as a favorite methodological tool for qualitative researchers [7] because this approach could easily obtain useful information. It allowed researchers asking questions and giving responses face-to-face.

The focus group interviews were semi-structured and conducted in Cantonese or Putonghua because some participants spoke in Putonghua only. The focus group interview took approximately 30 minutes per session. There were four focus group interviews. Each focus group interview had 3 to 4 interviewees to share their feeling of using a mobile device to learn. Each group's interviewees come from similar major discipline. Table 1 summarized the qualitative data of participants in the four focus group interviews. All data were to be kept in private, and the results of interviews were being used for research purposes only. The interviews were being scripted and sent to the interviewees for confirmation before the review.

Table 1: Basic Information of focus group

Group	Major of Studied	Gender	No. of participant
A	Arts	Female	4
B	Business	Female	3
E	Engineering	Male	4
S	Sciences	Male	3

After focus-group interview, we conducted individual interview for each participant to explain more deeply what reasons for using a mobile device to learn. The interview was conducted in Cantonese or Putonghua and took approximately 30 minutes per session. All data would be kept in confidential and the participants would give their written consent to their interviewers for research purposes. The transcription would be sent to the interviewees for confirmation before analysis.

From the collecting of qualitative data, according to the ethical consideration, all of the interviewees are assigned to have a specific code. All codes had three digits. The first digit indicates student's major study - alphabet "A" represents the student is studying in Arts, alphabet "B" represents in Business, alphabet "E" represents in Engineering and alphabet "S" represents in Sciences. The second digit is "0". The third digit is the student's number. For example, "A01" refers to the first student studying in Arts.

Findings and Discussion

This section would like to discuss the findings from focus group interview and individual interview. This study found that ten reasons for students using a mobile device to learn.

1. Mobility

Mobile learning can benefit learners by providing instructional materials and interaction through their mobile devices wherever and whenever they need it [8]. Besides, learners believed that using a mobile device to learn can be more convenience, expediency, and immediacy [9]. Moreover, the features of mobile learning were the flexibility for students to engage in the educational process and material in anywhere and at any time [10].

Guangzhou University students believed mobility is the major key to helping them to learn. Students agreed that mobile searching could let them search in a lesson or out of lesson immediately. Moreover, they expressed that they always use mobile devices to read, especially for reading academic notes. It is because they believed the power of

mobile devices is the mobility [11, 12]. They could read and search information anytime and anywhere. Student E01 has the practice to read electronic books in bus, restaurant, library or coffee shop. Student A01 was interviewed and stated:

"I like to read the information of social sciences. So, I frequently read social sciences articles or electronic books. The benefit of reading electronic books is that I can read the updated internet articles."

Students believed that the strength of using mobile devices was that they can express their opinions without time and place limitation. If teachers or classmates are busy and cannot reply immediately, they can read the message and reply when they are available. Therefore, they did not need to consider their availability to ask their questions as they can answer whenever they are available. So, this communication approach may not affect their works. On the contrary, using the desktop to communicate may not reply the message immediately if learners are out of the home. Using phones for voice communication may affect teachers or classmates if they are working. Therefore, they prefer using this communication approach.

2. Improve Learning Effectiveness and Efficiency

Motiwalla [13] express mobile devices could improve their learning effectiveness and efficiency. Smith [14] defined learning efficiency is enhancing the rate of learning and learning effectiveness is enhancing the mastery and retention of facts, concepts, and relationships.

Students A01, A02 and B03 indicated that mobile devices can enhance their learning performance especially learning more effective and efficient. Without mobile devices, they may not prefer to ask questions to teachers or classmates for the problems of study. Without mobile devices, they cannot join the virtual study group with classmates before the examination. Students B03 and S01 expressed they can ask and answer questions, or sharing data files promptly, by using mobile devices. Students A02 was interviewed and stated:

“My teacher used QQ group to discuss with students.”

Students B03, E01, and E04 agreed mobile devices can reduce the communication time for discussion and share with teachers or classmates. Student B03 was interviewed and stated:

“I frequently use QQ (one popular instant message in Mainland China) to discuss with classmates about the group project because QQ allows discussion immediately and has a record to trace discussion. I believed a discussion with classmates is very an important in the learning process. Through the interaction, we can express our point of views on different topics and listen to classmates’ different opinions.”

Also, students A02, B02, and E03 agreed that mobile devices are effective for information storage. Consequently, they do not need to spend time on memorize information. Moreover, student B01 and E01 agreed that using a mobile device to search is the most effective study mode and saving time.

Furthermore, student A02 was interviewed and stated:

“The function of inputting characters is the strength of the mobile device. The user may not need to be familiar with Chinese characters input method and input Chinese characters in high speed because there are many assisting Chinese character input methods such as free handwriting apps or voice input apps. Hence, the speed of input characters is faster than writing. Besides, most mobile devices can replace external data disk to store data such as SD card, so the data storage is unlimited.”

Students S03 and E01 were highly preferred to use a smartphone for reading electronic papers as they would like to read immediately, effectively and efficiently. Furthermore, six students said a smartphone could store many electronic books so that they could read electronic papers anytime and anywhere. Student S02 was interviewed and stated:

“Comparing with traditional reading books, electronic reading allows me to read many types of books which could be downloaded from The Internet.”

Student B02 was interviewed and stated:

“I prefer using a mobile device to record text format information because the mobile device is flexible in editing text information. I can immediately insert a paragraph or delete words when editing my diary or study notes. Moreover, I use the functions of copy and paste to avoid many input characters so as to save time.”

3. Learner Autonomy

Holec[15] defined learner autonomy as the “ability to take charge of one’s learning”. The autonomous learner tends to integrate whatever he or she learns in the formal context of the classroom with what he or she has already become as a result of developmental and experiential learning[16].

Student A02 was interviewed and stated:

“I search different types of learning materials such as video or websites to learn English. I used my mobile device for watching English online movies, listening to English music, translating any unknown vocabulary, and recording my English speaking practices. I believed the mobile device could facilitate learning autonomy.”

4. Information Acquisition

Student S02 expressed that using a smartphone could let him absorb the updated information such as news or articles because most apps provided updated news to him for understanding what are happening in the world.

Student A04 was interviewed and stated:

“I search most updated learning materials by the mobile device for learning. I believed up-to-date knowledge is very important for my learning. Thus, the mobile device can facilitate in acquiring updated information.”

5. Acquire Knowledge

Nowadays, acquiring knowledge should not be limited to learning the lesson. Acquiring knowledge should be happening anytime and anywhere [10, 17]. Students used mobile devices to read their study notes, digital books, websites and watch video for acquiring knowledge. Student E03 was interviewed and stated:

“I always use a mobile device for acquiring knowledge in different formats such as video, audio, and text format.”

6. Enjoyable Learning

Enjoyment as a type of intrinsic motivation and perceived usefulness as a type of extrinsic motivation [18]. It captures the attention of students is an essential aspect of promoting meaningful, active learning.

Students agreed that mobile devices can enhance their motivation in learning because mobile devices are the tools for their daily life. Hence, student S03 stated mobile device is a suitable learning tool for learning. Indeed, students enjoyed using mobile devices to learn, because the learning process is full of fun. Mobile devices are suitable learning tools for learning. Student S03 was interviewed and stated:

“Mobile device is suitable for learning because place and time do not restrict the mobile device. Furthermore, the mobile device is a powerful tool for self-learning. I enjoyed using a mobile device to learn”.

7. Learning Diversification

Mobile devices have roles of multi-functions and can be the learning tools in the lesson or out of a lesson because they can download different types of learning apps for learning. For example, students believed mobile devices can be a tool of the translator. Students A03, E01, E02, E04, S01, and S02 mentioned that they always download different types of learning apps [19] such as translation apps to learn English. They always use mobile devices to translate vocabulary or sentence for study. Student A03 was interviewed and stated:

“I always use mobile devices to check online dictionary in the lesson.”

Student E01 was interviewed and stated:

“Practicality, entertainment, and multi-functionality are the benefits of mobile devices.”

Additionally, students E04, S01, S02 and S03 downloaded the apps of scientific or engineering calculator into their smartphones for calculation in the lesson. Student E04 was interviewed and stated:

“I download engineering equation apps to find a solution. The benefits of downloaded the apps are no need to bring a calculator and save time to search the equation from books.”

8. Learning Expansibility

Students use mobile devices to search learning resources, books, professional articles, papers, and learning apps for study. Students B01, E01, and E04 search learning resources from Baidu, student A03, and S01 search professional articles and papers. Student S02 was interviewed and stated:

“I always search learning apps from my smartphone because most learning apps are assisting me with my study. Moreover, the learning apps are updated which can demonstrate the experimental results by graphs or animation.”

Students A01, A02, B02, and E03, agreed mobile recording can let them record what are happened via photo, video or text format immediately no matter in the lesson or not. Recording data function can facilitate Guangzhou university students to keep knowledge record highly frequency of learning experiences by the photo, video or text format for learning.

Furthermore, seven students use apps to learn professional knowledge. Students E02 and E03 use apps to learn to write programs. Students B02, B03, and S02 use mobile devices to do online assessments for professional examinations.

9. Cooperative Learning

Mobile devices have become the learning tools of collaborative and cooperative mobile learning [20 - 23]. Informal cooperative learning groups are used to focus student attention on the material to be learned, create an expectation set and mood conducive to learning, ensure students cognitively process the material being taught, and provide closure to an instructional session[24].

Students A01 and B03 agreed a mobile device is a suitable learning tool for collaborative learning. As university students, the learning style will be different from the secondary students. Collaborative learning is a major learning approach for university students. They need to discuss and share data files such as news, parts of a group project and articles with group mates for doing a group project. Hence, they believed sharing and discussion are a win-win approach for friends and classmates because both of them received the knowledge clearly and deeply. Student B03 was interviewed and stated:

“The advantage of using mobile devices to share is no time and place limitation. If she does not have mobile devices, it is not convenient for her to share information with others.”

Student A01 believed QQ private group is an effective and efficient method for collaborative learning [12, 20 - 22]. She was interviewed and stated:

“My classmates posted the questions on the QQ private group for discussion, and teachers gave us guidance for doing the assignment in the group. The power of using QQ private group is that all discussants did not need to discuss at the same time and the same place, but they could observe all the discussion procedures.”

10. Expanding Social Network

Vockley[25] found that around 50% of students used social networking to discuss schoolwork. Educators have observed the potential benefits of using social media for the purpose of education [26, 27]. Barlow [28] argues that social media can allow learning to be more interesting without time and place limitation. Student A01 was interviewed and stated:

“I always browse douban.com (<http://www.douban.com/>) because douban.com is a famous public discussion board in Mainland China. This platform lets netizens share their views and discuss different topics.

For example, people could share their skills of using MacBook Air. Through the discussion, discussants could understand specified topic comprehensively. Comparing with QQ private group, douban.com can do the sharing publicly with all netizens. Therefore, any netizen could express his/her opinion. I have some net friends discuss some common hobbies. The strength of public discussion board could gather a high amount of people for discussion, but the weakness is that the validity of the information could not be verified.”

One of the reasons to explain that is QQ group is not only a platform for classmates' learning discussion but also is a part of their daily life. They use their QQ accounts contacting with their personal friends and read updated news on the QQ online platform. Sometimes, they share their feelings, photos, opinions, and articles on their QQ online platforms with their friends. So, smartphones are very important for students to read the QQ message spontaneously. The weakness of electronic learning platforms is not only receiving the message as quick as possible, and also, the platform is only able to provide learning materials and activities for their formal learning. Therefore, students may not have a strong motivation to do their discussion on electronic learning platforms.

References

1. Boticki, I., Baksa, J., Seow, P., & Looi, C. (2015) Usage of a mobile social learning platform with virtual badges in a primary school. *Computers & Education*, 86, 120-136.
2. Cheon, J., Lee, S., Crooks, S. M., & Song, J. (2012) An investigation of mobile learning readiness in higher education based on the theory of planned behavior. *Computers & Education*, 59(3), 1054-1064.
3. Traxler, J., & Kukulska-Hulme, A. (2015) *Mobile learning: The next generation* Routledge.
4. Quinn, C. (2000) *mLearning: Mobile, wireless, in-your-pocket learning*. LiNEZine, 2006.
5. Traxler, J. (2007) *Defining, discussing and evaluating mobile learning: The moving finger writes and having writ....* The International Review of Research in Open and Distance Learning, 8(2).
6. Krueger, R. A. (2009) *Focus groups: A practical guide for applied research* Sage.
7. Denzin, N.K. (1973) *The research act: A theoretical introduction to sociological methods* Transaction publishers.
8. Corbeil, J.R., & Valdes-Corbeil, M.E. (2007) Are you ready for mobile learning? *Educause Quarterly*, 30(2), 51.
9. Seppälä, P., & Alamäki, H. (2002) *Mobile learning and mobility in teacher training. Wireless and Mobile Technologies in Education, 2002. Proceedings. IEEE International Workshop On*, 130-135.
10. Dew, J. (2010) Global, mobile, virtual, and social: The college campus of tomorrow. *Futurist*, 44(2), 46-50.
11. El-Hussein, M.O.M., & Cronje, J.C. (2010) Defining mobile learning in the higher education landscape. *Educational Technology & Society*, 13(3), 12-21.

12. Zurita, G., & Nussbaum, M. (2007) A conceptual framework based on activity theory for mobile CSCL. *British Journal of Educational Technology*, 38(2), 211-235.
13. Motiwalla, L. F. (2007) Mobile learning: A framework and evaluation. *Computers & Education*, 49(3), 581-596.
14. Smith, K. A. (1987) Educational engineering: Heuristics for improving learning effectiveness and efficiency. *Engineering Education*, 77(5), 274-279.
15. Holec, H. (1979) Autonomy and foreign language learning. ERIC.
16. Little, D. (1995) Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System*, 23(2), 175-181.
17. GimenezLópez, J., MagalRoyo, T., Laborda, J.G., &GardeCalvo, F. (2009) Methods of adapting digital content for the learning process via mobile devices. *Procedia-Social and Behavioral Sciences*, 1(1), 2673-2677.
18. Davis, F.D., Bagozzi, R.P., &Warshaw, P.R. (1992) Extrinsic and intrinsic motivation to use computers in the workplace1. *Journal of Applied Social Psychology*, 22(14), 1111-1132.
19. Safko, L. (2012) *The social media bible: Tactics, tools, and strategies for business success* (third ed.)John Wiley & Sons.
20. Huang, Y., Huang, T., & Hsieh, M. (2008) Using annotation services in a ubiquitous jigsaw cooperative learning environment. *Educational Technology & Society*, 11(2), 3-15.
21. Huang, Y., Jeng, Y., & Huang, T. (2009) An educational mobile blogging system for supporting collaborative learning. *Educational Technology & Society*, 12(2), 163-175.
22. Järvelä, S., Näykki, P., Laru, J., &Luokkanen, T. (2007) Structuring and regulating collaborative learning in higher education with wireless networks and mobile tools. *Educational Technology & Society*, 10(4), 71-79.
23. Lundin, J., & Magnusson, M. (2003) Collaborative learning in mobile work. *Journal of Computer Assisted Learning*, 19(3), 273-283.
24. Johnson, D.W., Johnson, R.T., Smith, K.A., & Center, C.L. (1989) *Cooperative learning* Interaction Book Company.
25. Vockley, M.M. (2007) *Creating & connecting: Research and guidelines on online social and educational networking* National School Boards Association.
26. Hughes, G. (2009) Social software: New opportunities for challenging social inequalities in learning? *Learning, Media and Technology*, 34(4), 291-305.
27. Ng, E.M., & Wong, H.C. (2013) Facebook: More than social networking for at-risk students. *Procedia-Social and Behavioral Sciences*, 73, 22-29.
28. Barlow, T. (2008) Web 2.0: Creating a classroom without walls. *Teaching Science*, 54(1), 46-48.

Please Submit your Manuscript to Cresco Online Publishing

<http://crescopublications.org/submitmanuscript.php>