The Survey About Impact of Learning Attitude and Competence in Using Mobile Learning Tools

Xiao CHENG
Hubei University of Chinese Medicine, School of Management, Development Research Center of Traditional Chinese Medicine, Wuhan, Hubei Province, China
48899293@qq.com

Keywords: Mobile Tools, Professional Competence, Survey

Abstract. Objective: to study the impact of students' learning attitude and competencies in using mobile tools. Methods: based on survey of 118 marketing major students using mobile learning tools in class, we analyzed students’ use feeling and learning about 6 functions in QQ and WeChat. Results: according to the statistical results we summarized 6 functions to the influence of 5 kinds of professional competence quality, put forward the development of mobile learning effect depended on the improvement of mobile tool, choose the right form of mobile learning tools according to the specialty and course, etc. Conclusion: with the development of mobile Internet technology and the application of smart phones, mobile learning tools will be widely used in teaching, at the same time, the huge amounts of data will become a big research teaching products database, which contains the unlimited business opportunities.

The introduction of research and background

With the sustained and rapid development of mobile Internet, mobile learning has become one of the important form of learning. The China mobile Internet research report pointed out that, as of August 2014, China had 527 million mobile Internet users, beyond the traditional PC users for the first time, young users as the main body, students group users accounted for (24.9%), college degree or above are the largest group[1].With the popularity of smart phones, the mobile fee is reduced, which is associated with the new problems appear in the teaching process, such as the large "bow" in class "slide" crowd, to some extent, affected the teaching focus on rate, some schools banned students play mobile phone, even adopt blocking network, confiscate the phones and other extreme practices to avoid students surf the Internet[2].

But these practices can really stop the students use the Internet? Apart from the rationality of using the Internet query information , this method of "stuck" in the long run is not conform to The Times require.

The national medium and long-term education reform and development plan outline (2010-2020) pointed out: "strengthening the application of information technology, updating the teaching idea, improving teaching methods, than improve the teaching effect." In March 2012, the ministry of education issued development plan of education informatization decade (2011-2020) emphasized on depth fusion of information technology and higher education teaching mode, innovative talent training mode.
"Leading is better than Blocking", through the creation of platform, resources construction and service innovation to promote and optimize the mobile learning, reasonable use of mobile Internet and mobile terminal of the auxiliary teaching are the development trend, the teacher should also adapt to this trend, engaged in mobile Internet teaching reform.

The concept of mobile learning and application

What is mobile learning?

Mobile learning is the environment support wireless network, mobile communication equipment (PAD, smart phones, wearable device) as the tool, digital learning resources for content support,
Mobile learning abroad study began in 1995, the United States Carnegie. Mellon Wireless Andrew research projects, it lasted for 3 years, finally through wireless infrastructure construction offered wireless high-speed connection cover the entire campus for teachers, students and managers.

At present, the application of mobile learning abroad are mainly concentrated in Japan, Europe and North America which is in developed countries and regions, some mobile learning research started earlier has been underway for 5 to 8 years, the main research content is the application form and effect of mobile learning in college, middle and of primary school and enterprise training, academic community thought that this is a kind of education form which will bring significant change to the modern education. From the research purpose basically has two kinds, one is promote by the current E - Learning (digital Learning) provider, they strive to the marketing of M - Learning (mobile Learning) using experience for E - Learning reference, the major role is promoting enterprise technology products; Another kind is initiated by the education institutions, they are based on school education, try to use new technology to improve the teaching, learning and management.

Mobile learning research and practice in China is relatively backward, but developing rapidly. In 2011, Shanghai Jiaotong university, officially launched the mobile learning network (http://daydaymobile.Onlinesj - tu.Com).In November 2012, "2012 China international distance education conference" was held in Beijing, the meeting declared "China mobile learning alliance" was formally established.

The main form of mobile learning applications

The main form of domestic mobile learning applications is 1. E-books and education APP; 2. online learning in the form of "micro-course""Mook"; 3. Internal and external interaction teaching in auxiliary in the form of QQ discussion groups, WeChat application (barrage teaching, voting, and code reading) Mobile media make learning overcome the classroom teaching’s shortcoming, which are immobilized, stylized, unilateralization, more adaptable to "after 90" learning characters of college students, using "fragmentation" of time, more interactive, situational, personality, it has increased students' interest in learning.

Research purpose

Every professional college students have their own characteristics, some of the current mobile teaching method can be used directly, the others need to make improvement based on the characteristics of their professional study, and there is no system research about the suitable practice for the professional students in the country.

To measure the use efficiency of mobile learning tools, according to the related research, can be measure of three aspects: creativity, learning initiative, learning interest. And according to the research of the competence, the most important competence of management professional students are the master of professional knowledge, acknowledge of industry, expression skills, creativity and interpersonal ability. This study is measure the applicability of the mobile learning tools through the mobile learning tools (mainly use the campus network of mobile phone) assisted learning effect and improving professional competence, eventually provides some references of improving students’ competence and the professional training quality.

The Mobile Learning Tools Influence on Student's Learning Attitude and Learning Ability

The survey process

This study carried out application practice of mobile learning tools from March to June in 2017
on "advertising" class in 3 classes whose major is management, refer to the related literature, this experiment of mobile learning tools including WeChat and QQ function under the chat software, specific include six function application: WeChat“doing questionnaire”; WeChat "study case through QRcode"; WeChat "DanMu"; QQ "group for communication"; QQ "group for setting homework and material"; QQ" group for voting". At the last lesson of the course we distributed questionnaires through WeChat "questionnaire star", 118 valid questionnaires were received.

The Content of Survey

The Questionnaire includes 12 questions, they are measured for: the impression of mobile learning tool; evaluation of learning effect to the six tools (5 Liket scale: from "very bad" to "very good"); Six tools for improvement of creativity, Learning initiative, learning interest (Liket magnitude scales: from "disagree" to "agree"); 6 tools for the master of professional knowledge, industry knowledge, improvement of skills, creativity, interpersonal relationship processing; And the overall evaluation of 6 kinds of mobile learning tools ordered from high to low. Finally also includes an open question "your advice about assist mobile learning tools".

The result of survey

The impression of mobile learning tools

The subject use students' memories of mobile learning tools to measure, the first three are: WeChat "DanMu"(86.44%), QQ "group for communication"(74.58%) and QQ "group for voting" (72.88%).

The effect satisfaction of 6 tools

The Students answered the "good" and "very good" accounted for 79.66% to the effect satisfaction of WeChat "doing questionnaire"; The Students answered the "good" and "very good" accounted for 70.34% to the effect satisfaction of WeChat "study case through QRcode"; The Students answered the "good" and "very good" accounted for 76.27% to the effect satisfaction of WeChat "DanMu"; The Students answered the "good" and "very good" accounted for 84.75% to the effect satisfaction of QQ "group for communication"; The students answered the "good" and "very good" accounted for 86.45% to the effect satisfaction of QQ "group for setting homework and material; The Students answered the "good" and "very good" accounted for 87.29% to the effect satisfaction of QQ "group for voting".

![Figure 1. The effect of 6 tools.](image-url)
Mobile learning tools to the improvement of creativity, learning motion, learning interest

For the “creativity” answered “agree” and “very agree” accounted for 72.89%; for the “Learning initiative” answered “agree” and “very agree” accounted for 83.05%; for the “learning interest” answered “agree” and “very agree” accounted for 80.51%.

![Figure 2. The improvement of 3 abilities of 6 tools.]

1: Creativity
2: Learning initiative
3: Learning interest

Mobile learning tools to the improvement of 5 abilities

To the improvement of "professional knowledge master", most of option is QQ"group for Setting homework and material"(65.25%); to the "acknowledge of industry", most of option is WeChat"doing questionnaire"(58.47%); to the "ability of expression", most of option is WeChat"DanMu"(61.86%); to the "creativity" ,most option is WeChat"DanMu" (51.69%); to the "interpersonal relationship", the most option is QQ"group for voting" 44.92%.

The overall evaluation of 6 mobile learning tools

Cumulative scores from high to low is in turn: QQ "group for setting homework and material"; WeChat"DanMu"; QQ"group for communication"; WeChat "study case through QRcode"; WeChat "doing questionnaire"; QQ"group for voting".

![Figure 3. The overall evaluation of 6 tools.]

1: QQ"group for Setting homework and material
2: WeChat"DanMu"
3: QQ"group for communication"
4: WeChat"study case through QR code"
5: WeChat “doing questionnaire”
6: QQ"group for voting"
Conclusions and Recommendations

Mobile learning tools can improvement students' learning initiative, creativity and interest

To the question whether the 6 tools improve the ability "creativity" "learning initiative" "learning interest", answered "agree" and "very agree" accounted for 72.89%, 72.89%, 83.05%, proportion are all high, show that students’ attitude of mobile learning tools to assist teaching is optimistic, especially the “learning initiative”. In the open questions, students also reflect the mobile tools are the effective complement to classroom teaching, increasing the participation and fun, students and teachers will be able to communicate after class, which can promote interpersonal and team cohesion.

Mobile learning’s effect depends on the development of mobile application teaching tool

As the hardware part of the mobile study, its running state seriously affect the use effect. This study used the QQ and WeChat, the main function of QQ "discussion groups", the function in the group of "vote" are running well, but some WeChat function, such "barrage" and "questionnaires" function which should add public number first, will be affected by the ability of operation of public, sometimes "barrage" cannot be used, "questionnaire" link is not on the situation, they all influence the students’ use feeling.

As the move tool applied widely popular, more and more software and APP makers will engagement into mobile function development, we can believe that the development of technology will improve the effect the mobile learning continuously in the future.

Mobile learning tools should choosing appropriate form according to the professional and course

Different professional has different competence

The training goal of management major in our school is to develop professional management personnel in line with the social needs, not only have practical ability but also have macroscopic strategic industry thinking, the basic criterion to guide the training goal is the relevant professional "qualified competence" which confirmed in the early research\(^9\).

The five competences “professional knowledge master, acknowledge of industry, expression skills, creativity, interpersonal ability” should be training in effective cooperation of various teaching methods, traditional teaching cannot fully achieve these goals. Such as "acknowledge of industry", in the past it need students search information after class by themselves, students were always lack of guidance, at present, through QQ group, teachers can release industry information and reading material, students use “pieces of time” reading; while "interpersonal relationship" and "creativity" are more need to keep pace with the development of teaching tools, such as WeChat "barrage" “QQ vote", etc.

Different professional has different competence, the mobile teaching tools also need to choose suitable form, the abuse of mobile teaching tool not only cannot achieve the teaching effect, it will waste of class time\(^5\).

Different course has different capacity requirement

Different course has different teaching goals, the study in the experimental course "advertising" is the major important professional course in marketing professional, but not for the students who is majoring in media professional, it should not only have professional characteristics, but also to lay particular stress on the application and practice, with particular emphasis on presentation skills, the cultivation of creativity, which is consistent with professional training objectives. In the early study, we found some professional basic course was not suitable for the mobile tool, such as some theory course emphasizing the systemic.

So the mobile tool is not suitable for all courses, we should choose appropriate tools according to the characteristics and training objectives.
Perspective of Future

Mobile learning tools are emerging auxiliary teaching tools with the widely application of the mobile Internet and the development of smartphone, they are also produced for the young students information acquisition habit, at the same time, the huge amounts of data will become a large database for teaching research products, which contains the unlimited business opportunities.

"Who can be loved by students, who can become the mainstream of society in the future", as a college and college teachers, we should also conform to the trend, continuously explore teaching tools and methods, make great effort to improve the teaching effect.

Acknowledgement

This research was supported by the key subject of Hubei University of TCM" The co-creation of teaching method reform and teaching value in mobile internet environment"

Reference


