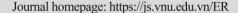


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### Integrating Mobile Technology into English Lessons: A Case Study at VNU University of Languages and International Studies and VNU University of Education

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Abstract: The purpose of this study is to investigate the mobile tools (based on Web 2.0 platform) for language activities in English lessons for English-majored students at VNU University of Languages and International Studies (VNU ULIS) and non-English majored students at VNU University of Education (VNU UED). The study involved 21 newly enrolled Master degree students in Teaching Methodology program from VNU UED participating in an introduction program of English for Educational Purposes, and 25 4th year English-majored students from VNU ULIS. The participants were allowed to use their own devices (smartphone, Ipad, Tablet, Laptop) during English lessons and were introduced mobile applications based on Web 2.0 platform for all their activities in and after class (speaking, writing, reading, listening, translating and homework doing). The study results show that English learning assisted by a mobile device was useful and fun for both groups in terms of developing language skills as well as technology competencies. Using a BYOD/BYOTs (Bring Your Own Devices/Bring Your Own Tools) both inside and outside the classroom, the participants expressed their need, interest and self-confidence in having more mobile apps for English learning despite their background language proficiency.

Keywords: Mobile technology, devices and apps, English learning, Technology acceptance

#### 1. Introduction

In recent years, English has become a compulsory foreign language in training programs at VNU. In particular, non-language Master students are required to meet the B1 CEFR-level, whereas it is imperative for English language learners to meet the C1 CEFR-level. In this study, we selected 2 groups of learners as mentioned above. Although they

are different from each other in terms of their majors and training levels, they are similar to each other in terms of their English outputs required to satisfy CEFR (Common European Framework of Reference) criteria and levels. The two groups are the students from Master Degree of Teaching Learning Methodology Program from University of Education, VNU-UED, and the 4-th year students from English Language Specialization from University of Languages and International Studies, VNU-ULIS.

For group 1, English is taught as English for academic purposes. The learners are not quite

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proficient in using 4 skills such as listening, speaking, reading and writing. However, they obtain certain educational vocabulary. To them, the greatest concern is how to use English in professional communication basically, read professional articles, and perhaps can write short academic texts. Among 21 students of this group, 15 and 6 students major in Philology and History teaching education, respectively.

Group 2 includes 25 English language major students. For this group, the learners have used English as well as 4 skills like listening, speaking, reading and writing quite successfully in their communication. However, it is difficult for them to access to the system of issues and terminologies in different English linguistic domains such as Discourse Analysis, Semantics, Pragmatics, etc.

#### 2. Background and research questions

The use of the Internet at large has moved interaction with content towards communication between people, and the ability to support and maintain communication beyond classroom through technology transforming educational experience (Garrison 2016) [1]. This is a trend that is further strengthened by the ubiquitous access to mobile technology for educational purposes enabled by BYOD practices. The term BYOD - Bring Your Own Device was originally coined in 2009 (Johnson et al. 2015) and refers to "the practice of people bringing their own laptops, tablets, smartphones, or other mobile devices with them to learning or work environments" (Johnson et al. 2016) [2].

The common sence of supported feature of mobile learning (and BYOD/BYOTs) that connects ubiquitous technology access and learning - the anytime, anyplace access to content with anybody.

While mobile learning has its advantages, a stronger case could be made for other models such as social connectedness (based on sociocultural approach for language learning) with peers and teachers, as well as the added level of control and the possibility for self-regulated learning offered to the individual learner. The anytime, anyplace of easy access and usefulness are thus more about the learners being in control of the boundaries of time and place, expecially in the academic conversation [3-5].

Language skills and awareness of communication aspects have proved to be some of the most important aspects for integration. Since a large number of smartphone users-students, development of mobile technology as learning tools supports digital transformation, sharing knowledge in the process of language learning and practices within ICT use.

The objective of study is to explore how they access and accept mobile technology that can support integration of English learners towards sustainable academic conversation in English and languages skill building in particular. The second purpose of study is to investigate the role of mobile technology as an additional tool that can be used for language learning between teacher and students.

The starting point is to examine the mobile activities that both kinds of students used and engaged during their English learning process, developed pronunciation, speaking and translating skills.

Our research questions are:

- 1) How did mobile technology engage and support students during English lessons?
- 2) How did participants accept mobile technology toward improvement pronunciation, speaking and translating skills and self-confidence in English usage (conversation) during English lessons?

There is some research aspects related to the integration of mobile devices and apps into English lessons for both kinds of students. In the lessons they can use existing apps (based on web 2.0 platform) such *uselom.com* and *Google translate* that can be accessed through smartphones.

For the group of non-linguistics oriented Google translate app is supported as mediating

tool that provides instant translating (in both modes of writing and voicing), messaging, listening and speaking. This application in English learning could improve students' motivation to listen, write, translate, and a positive effect on motivation with language self-confidence could be established for them.

Video streaming refers to videos or broadcast made available to students and teachers online, typically via video sharing platform. An experiment with video sharing by *useloom.com* as a preparatory tool for practical classes led to an increase in attendance and an improvement in the perception of the subject relevant knowledge and skill for linguistics specialized students. The using app indicated that this tool encouraged students to present homework, ask and share questions (especially benefited shy students), and allowed students to gain a deeper understanding of the language lessons by exposing them to other people's ideas and opinions.

#### 3. Theoretical framework

This study based on a socio-cultural approach to learning where learning, human relationships/interactions social culturally constituted, playing an essential role in thinking and learning (Vygotsky, 1978) [6]. The dialogic process of learning is played out in multimedia interactions between users and the mobile devices they engage with. Learning language must be embedded in language contexts and allows learners to use all possible media for expressing language rather than focusing on each skill such as listening, speaking, reading and writing. This approach allows us to imply mobile technology to support learners (Ilic, P. 2015) [7].

According to Wertsch (1998) the best way of language learning could be introduced as a way to emphasize transformation, appropriation, i.e. "to bring something into oneself or to make something one's own" [8]. Language here is not just a cognitive phenomenon but is also seen from the user rather than a grammatical perspective (Halliday, 2007) [9].

Spoken language is more instantaneous and situated in the interpersonal, interactive environment where it is produced. Speech (spoken language), listening are key skills in language learning, something that mobile technology can support.

The lesson of analysis is the mediated activities the participants are engaged in when using mobile devices. These activities are part of the boundary crossing that the participants accept and perform technology devices with TAM (Technology Acceptance Model) in learning process.

Davis used TAM (1989) to analyze computer usage behavior and acceptance that lead to explaining users' behaviour across a broad range of end-user computing technologies [10]. The basic TAM model included and tested two specific beliefs: Perceived Usefulness (PU), Perceived Ease of Use (PEU), and Attitudes towards usage (ASU).

TAM (David, 1989) has become so popular that it has been continuously developed and cited in most of the research that deals with users' acceptance of technology. In this study TAM attempts to help researchers to distinguish why a particular mobile technology tools (as external variable) may be acceptable or unacceptable and take up suitable measures by explanation besides providing prediction.

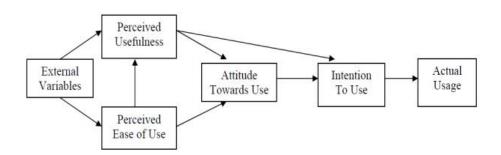


Figure 1. Initial TAM Model (by Davis, 1989).

#### 4. The research setting

The participants in the study were 21 newly enrolled Master degree students in Teaching learning Methodology program (VNU-UED) participating in an introduction program of the English for educational purpose, and 25 linguistics specialized 4-th year students from VNU-ULIS.

The adopted research TAM model for these language courses consisted of 15 items that

measured "perceived usefulness" (4 items), "perceived ease-of-use" (4 items), "actual system use" (4 items) and "behavioural intention to use mobile devices" (3 items). The response scale for all items was a five-point coded as: 5: Strongly agree; 4: Agree; 3: No opinion; 2: Disagree; 1: Strongly disagree.

According to the research objective and consistent with the related literature, this study tested the following hypotheses (H):

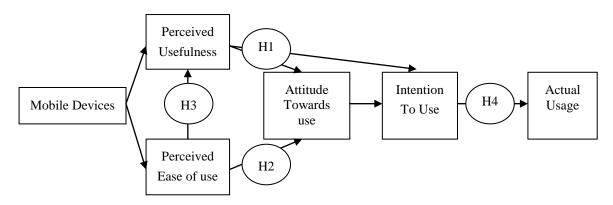


Figure 2. Adopted TAM Model for the research.

- H1: Perceived Usefulness (PU) has a significant influence on attitude towards Behavioral Intention to Use (BIU) i.e. the mobile technology positively supports students on their learning tasks.
- H2: Perceived Ease of Use (PEOU) has a significant influence on attitude towards Behavioral Intention to Use (BIU) i.e. the students' readiness to use mobile technology for their language learning tasks.
- H3: Perceived Ease of use (PEOU) has a significant influence on Perceived Usefulness (PU) i.e. the students comfortably use the mobile technology during their language learning.
- H4: Behavioral Intention to Use (BIU) will have a significant influence on users' Actual Use (ASU) of mobile devices i.e. the students commit to use the mobile technology for further language learning.

The functions of mobile technology have been introduced for both students group as the followings:

The mobile technology was built around a number of English lessons activities (in/out class) which enabled students to listen to, translate, record and play back through conversation, drill on full sentences (or segments of sentences, paragraph) that could be practiced any time they wished. The mobile technology supported students learning thus a combination of the participants' own practice outside of class with sharing homework tasks and feedback within learners and teachers.

Technology	Main function	The usages in language learning
	Screenshot	F-2-F lesson
	Screen sharing	Instant explanation language formula
	Video recording	Grammar presentation
<b>6</b> loom	Presentation sharing	Home work
	Online learning	Instant Feedback
	Lesson recap	Collaborative work in/out class
Useloom.com	Instant feedback	
	Translate word	Writing academic paragraph
G	Translate image	Writing abstract
	Translate by speech	Vocab learning (for non-linguistic)
	Translate text message,	Listening, speaking translating drill
Google Translate	webpage, document	Conversation skill in English training
Coogle Hallslate	Translate bilingual	
Google translate App	conversation	

#### 5. Methodology

The programs include themes linked to discourse, speech act, the cooperative principle and so on (for linguistics specialized students) and English for academic purposes (for non-linguistics Master students).

The objectives of program for the first group students (non-linguistic) are as follows: Use listening, speaking, reading and writing skills at basic level (B1); Implement language communicative activities in their professional fields; Apply language communicative strategies to present the research problem; Read, summarize and present the main content of the issue related to education and learners' profession; and Write research abstract related to dissertation topics.

Meanwhile, for the English language major students: the program content includes main subject issues, discourse and society, discourse and pragmatics, discourse and genre, discourse and conversation, discourse grammar and multimodal discourse analysis.

The study took place about-and-over a period of ten weeks, which is the duration of the two lessons introduction of mobile devices such as **useloom.com** and **Google Translate** applications for both groups.

During class time and at home, both groups are allowed to use the above tools to perform assigned tasks. They are allowed to use Google Translate for learning translation practice, listening and speaking English, pronouncing words, translating scientific articles' abstracts, translating English foreign web sites for reference; to use useloom.com for reporting and exchanging learning achievements, and submitting their final presentation slides, reports and/or videos. The instructors/teachers designed exercises and tasks in listening, speaking, reading, writing and translating on the contents related to the educational topics (lesson planning, summary writing, micro-teaching, new methods applying and others) for learners of the group 1 to perform in the classroom environments with the support of Google Translate. For group 2: the faculty required to undertake group exercises or group works related to deep language topics, use **useloom.com** for sharing, discussion and presenting.

#### 6. Analysis and results

In the research analysis, we combined the data from lessons observations and structural questionnaire of the TAM model and hypotheses tested by examining the path coefficients and their significance. Content and language skills improvement analysis was used after lessons observation. Descriptive statistics was used to analyse the data from the questionnaire.

Coefficients p-value = 0.000 < 0.05 between PU, PEOU, BIU and ASU confirm that hypotheses H1, H2, H3, H4 are supported by data.

#### 6.1. Mobile activities during lessons

The results from both questionnaires and lessons observations show that the students were willing to participate various learning activities through smart phones or laptops for conversation in general and for deep linguistic English learning in particular (taking part in language drills and tools for translating). Most of participants (39/46 students) easily accessed **useloom.com** and **Google translate** with smartphones (or laptop, Ipad) as a main media English learning tool.

# 6.2. Enhancing opportunities for speaking, listening and translating skill improvement

To the non-linguistic group of learners, they were quite excited about using **Google Translate** functions in their activities such as translating the articles' summaries from English into Vietnamese and versa, planning lessons in English, learning pedagogical vocabulary, practicing different teaching methods in literature and history, asking and answering numerous questions with their teachers, etc.

However, they still found it difficult to pronounce words or sentences, to hear the translation passages or to be shy when speaking. Relating to using the useloom.com the students show the lack of motivation in listening to sentences, recording their own voices over and sharing within. The low rate students of the first group) useloom.com using can be explained that most of students prefer to practice English in translating rather than speaking and listening. However, the speaking assignments (individual oral presentation of lesson plan or teaching selected topics) have been actively recorded by screen-sharing and submitted of all nonlinguistic students.

Whereas. 2 group mainly used useloom.com to exchange, present, perform and share their learning task-based results. The frequently commented students that the useloom.com could support them more effectively, if the learning task would be more coordinated and organized for self-learning in online format. Most students participated in at least five of the planned sharing online presentations via useloom.com, only 18/25 participants from the group made all ten screen casting recordings. But all homework or final assignments have been submitted by useloom.com which easily can be saved and shared by Gmail, social networking tools (Facebook, Twitter) or embedded in the web platforms.

#### 7. Limitation and discussion

There are several limitations of the present study that need to be considered. Firatly, the sample sizes were humble in general (46 participants with different levels of English acquisition competence) and it makes trends in the data collection. Secondly, the mobile technology engaged in English lessons was limited in scope that both base line of English fluency as well as technology competence of the participants are not considered: only some

of the mobile activities were related specifically to the language skills. Thirdly, the mobile technology is not specifically linguistic focused and activities ware situated as a mediating resource in a context of classroom training. However, the research results show how the students take advantage of their smart phone or laptop to integrate in English learning and suggest that targeted conservation practice (in this case with mobile technology support combined with oral skill practice in/out classes) increases linguistic self-confidence in a social interactive process.

Future discussion could be included of studies how a more independent learning [11] methodology could be adapted with the mobile technology and devices to promote English learning in social processes in terms of how the participants engaged with others to learn.

Relating to implications for future work, it would be relevant to build on the data from this study by exploring various mobile apps and their using model in relation to the activities students are engaged in English learning with different purposes.

#### 8. Conclusion

The mobile technology and BYOD/BYOTs allowed the lecturers to be more creative and therefore more efficient and effective teaching language. Technology access (useloom.com, Google translate app etc.) helped enhancing English lessons activities, motivate students, and engage them in/out classroom foreign language activities with more interaction in academic conversation.

For both groups of students-participants it is important to provide context, language motivation and environment for students practice what they are learning in a language course. People seem to remember, be motivated what they have learned be experiencing just speaking, reading, listening and translating. They should be involled in "live motivated" conversation situation (that based on mobile

technology and the need by themselves) to practice and improve language skills.

Meanwhile mobile technology is valuable, convenient approach that provides the ability to set up scenarios, language environment and simulation of being in a live conversations in/out the classroom. The tools of useloom.com and Google translate app provide the necessary practice and learning from experience or learning by doing, help students learn what they want to learn in most cases of academic conversation. Hence, it is expected that language teaching and learning trend will persist with effective mobile technology contribution.

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## Tích hợp công nghệ di động trong dạy học tiếng Anh: Nghiên cứu trường hợp của Trường Đại học Ngoại ngữ, Đại học Quốc gia Hà Nội và Trường Đại học Giáo dục, Đại học Quốc gia Hà Nội (ĐHQGHN)

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**Tóm tắt:** Bài báo nghiên cứu vấn đề tích hợp các công cụ di động (trên nền tảng Web 2.0) trong hoat đông day học tiếng Anh cho học viên không chuyên ngữ và sinh viên chuyên ngữ của 2 trường đại học. Nhóm thứ nhất (gồm 21 học viên cao học Trường Đại học Giáo dục, chuyên ngành Lí luận phương pháp dạy học bộ môn) chủ yếu tiếp cận tiếng Anh cơ bản với học phần tiếng Anh học thuật, gặp khá nhiều rào cản về ngôn ngữ. Trong khi đó, nhóm thứ hai (gồm 25 sinh viên năm thứ 4 khoa tiếng Anh, Trường Đại học Ngoại ngữ) được nghiên cứu các hiện tượng ngôn ngữ Anh khá sâu, bài bản. Cả hai nhóm đều được sử dụng thiết bị di động (smartphone, Ipad, máy tính bảng, laptop), được hướng dẫn, tiếp cân với một số ứng dung di động trên nền tảng Web 2.0 trong các hoạt động trên lớp và ngoài giờ lên lớp (học nghe, nói, đọc, viết, dịch, làm bài tập). Khảo sát được thực hiện nhằm làm rõ tính hiệu quả của việc sử dụng thiết bị di động cầm tay trong quá trình học tập, khả năng chấp nhận, tham gia và phát triển các kĩ năng giao tiếp của người học. Các kết quả nghiên cứu cho thấy việc học tiếng Anh có sử dụng công nghệ di động làm tăng tính hiệu quả, hấp dẫn và thú vị trong việc phát triển các kĩ năng ngôn ngữ cũng như công nghệ đối với cả 2 nhóm khảo sát. Cách tiếp cận cho phép sử dung thiết bị cá nhân (BYOD/BYOTs) và các ứng dung di đông trong các hoat đông học tập trong và ngoài giờ học đã góp phần nâng cao sư tư tin, hứng thú, đáp ứng nhu cầu học tập của người học mà không phu thuộc vào nền tảng và kĩ năng ngôn ngữ ban đầu của ho.

*Từ khóa:* Công nghệ di động, thiết bị và ứng dụng di động, dạy học tiếng Anh, chấp nhận công nghệ.