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**Using Some Smart Phone Applications Guided by
Connectivist Learning Theory for Developing
Secondary School Students' Written Translation
Skills and English Language Proficiency**

**By
Jihad A. M. Salman**

**A Teacher of English at El Wasta Secondary Institute of Al Azhar
tarekgana65@gmail.com**

﴿ المجلد التاسع والثلاثون - العدد الثالث - جزء ثانى - مارس ٢٠٢٣ م ﴾

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Abstract

The current study aimed at identifying the effectiveness of using some smart phone applications guided by connectivist learning theory for developing secondary school students' written translation skills and English language proficiency. Instruments of the study included written translation pre–post test, the new teaching method, open interview with some teachers, English language proficiency scale. The present study adopted the quasi– experimental research design. Findings of the study were favorably and encouraging as they indicated that the new teaching method had a significant effect on students' scores on the written translation test. Results also indicated that the students' means of scores on the post– test of written translation skills were higher than the means of the scores on the pre– test. It is recommended that training students on using some smart phone applications guided by connectivist learning theory should take place over a longer period of time. This research study could be used for teaching other skills of English language (e.g. listening, speaking and reading and writing). This research study needs to be replicated and pervaded with larger and more various samples to know how far written translation skills and sub–skills can be developed by using some smart phone applications in the field of English language learning.

Key Words: Smart Phone Applications, Connectivist Learning Theory, Written Translation Skills and English Language Proficiency.

مستخلص الدراسة

هدفت الدراسة الحالية إلى التعرف على فاعلية إستخدام بعض تطبيقات الهاتف في ضوء النظرية الترابطية لتنمية مهارات الترجمة المكتوبة و الكفاءة اللغوية للغة الإنجليزية لدى طلاب المرحلة الثانوية. و قد اشتملت أدوات الدراسة على اختبار قبلي/ بعدى للترجمة المكتوبة وكذلك طريقة التدريس الحديثة القائمة على استخدام بعض تطبيقات الهاتف في ضوء النظرية الترابطية، كما اشتملت على مقابلة شخصية لبعض المعلمين تتضمن أسئلة تقييمية لمعرفة آراءهم لواقع مستوى أداء الطلاب في استخدام مهارات الترجمة المكتوبة. كما تم استخدام المنهج شبه التجريبي في هذه الدراسة البحثية. و قد أشارت النتائج إلى أن طريقة التدريس المقترحة لها أثر دال على درجات الطلاب في اختبار الترجمة المكتوبة، كما أشارت النتائج أيضا إلى أن متوسطات درجات الطلاب في الأختبار البعدى للترجمة المكتوبة أعلى من متوسط درجاتهم في الأختبار القبلي. و قد أوصت الباحثة بأهمية استمرار تدريب الطلاب على بعض تطبيقات الهاتف في ضوء النظرية الترابطية لفترة زمنية أطول، و ذلك لأن الطلاب يجب أن يكونوا على دراية ببعض تطبيقات الهاتف الذكي في ضوء النظرية الترابطية لكي تساعدهم في تحسين تعلم مهارات الترجمة المكتوبة و الكفاءة اللغوية للغة الإنجليزية. كما يمكن استخدام هذا البحث في تدريس المهارات الأخرى للغة الإنجليزية. أيضا، يجب تطبيق هذه الدراسة البحثية على عينة أكبر و كذلك عينات مختلفة لمعرفة مدى تنمية مهارات الترجمة المكتوبة و الكفاءة اللغوية بإستخدام بعض تطبيقات الهاتف في ضوء النظرية الترابطية في مجال تعلم اللغة الإنجليزية.

1. Introduction

Modern society, with its rapid scientific and technological advances, has seen an exponential rise in accessible knowledge and continuously changing and emerging technologies. The emergence of the internet, particularly web 2.0 has provided access to the views and opinions of a wide range of individuals opening up opportunities for new forms of communication and knowledge formation. Previous ways of navigating and filtering available information are likely to prove ineffective in these new contexts.

The ability to access relevant information and harness the resources offered by the views and opinions of others have become important skills particularly as the need for lifelong learning, both formal and informal is increasingly recognized by individuals, organizations and institutions.

Translation is having a vital role to language teaching in general and English language proficiency in particular. Translation nowadays is a life skill, just like literacy in computers or the internet, and that students need to master in order to cope with the daily demands of language use and exchange. In short translation deserves a place within language teaching and students education courses.

Vermles (2010: 83–93) asserts that translation is a tool of improving learner's foreign language proficiency and a means of testing language knowledge. It is considered the fifth language skill and the most important social skill since it promotes communication and understanding among strangers. In today's global environment, there are many reasons for the movement of people from one country to another, as university students or for employment. This creates a challenge for teaching and learning English as an additional language, so students have to learn the English language.

Abdellah (2010: 18–33) mentioned that there are four main types of basic skills that students need to master in the field of translation as follows: 1) Reading comprehension skills; 2) Researching skills; 3) Analytical reasoning skills; and 4) Composing and production skills.

Students also need to master the following sub–skills of translation: such as: Identifying the meaning of new words and expressions. ,Reading for gist and details, Looking up in the dictionary to know the meaning of the new words. It is important to train teachers and students in translation skills and sub–skills as this will benefit them in their linguistic and professional development.

In the same token, **Ali (2012: 429)** states that translation is an efficient teaching method to facilitate students' acquisition of foreign languages. Through the process of doing translation, students apply their linguistic knowledge into practical use and raise awareness of the similarities and differences in morphology, syntax, semantics, and pragmatics between the two languages. Consequently, translation has found its place as an important skill that requires its own techniques, principles and approaches.

Connectivism is a learning theory that is designed for the digital age. It is one of the most prominent network learning theories which have been developed for e–learning environments in which educators have an important role to play in online learning. Students in today's classrooms are digital natives who have unique learning styles. Connectivism has been studied primarily in online college classes and has been shown to increase motivation and student achievement. It first appeared in Siemen's (2005), it's ideas which have been developed by Downes (2005, 2006, 2012).

In connectivist learning theory, a teacher guides students to information and key answers of questions as needed, in order to support their learning and sharing on their own and express what they find.

George Siemens (2004) and Stephen Downes (2006) developed the theory of connectivism for the digital age denouncing boundaries of behaviorism, cognitivism, and constructivism. Connectivism is an emerging learning theory, it is an exploratory attempt to connect the theory to the prevailing technology that has a reflection on the process of designing learning activities. This theory represent an important new pedagogical approach ideally suited to the network age, it is suited to learners with different skills, motivations, and dispositions.

Based on theories and trends that call for learning according to students' tendencies and attitudes, the use of smart phone applications which are becoming more common day by day consistent with students' interests, learning is possible anywhere and at any time. The use of smart phone applications in teaching is a modern scientific method; also, it is cheap and sometimes free.

Through smart phones we can provide a lot of interactive applications, which provide lessons, tests and videos that will help the teacher and students to use them to develop written translation skills as well as the development of English language proficiency.

International Journal of educational technology (2005) reviews that Connectivism is a learning theory based on the premise that knowledge exists in the world and not merely in the individuals' head. It suggests that knowledge exists within systems accessed by individuals who are engaged in activities. It has been dubbed the theory of learning in the digital age.

Some of the best smart phone applications that develop translation skills are: Golden Dictionary (EN- AR) application. ,Google Translate app. And Reverso Translation Dictionary app.

There are many mobile translation applications to convert any language as most people can not imagine travelling without a smartphone. Using smartphones with simple applications can make phones a personal translator.

The potential benefits of using smart phone applications in education is that they allow students to work together to reach a common goal, giving them a sense of how translation can be performed by using apps. Students become more active participants while educational situations, therefore the present study suggests an approach that enables students to translate and review, provide peer feedback via using smart phone applications.

Saigal (2018:1-2) explains that one can develop his/her English skills and English language knowledge with mobile applications. Being proficient in English writing and speaking skills is necessary to achieve success in professional career. But most people struggle to learn the English language and vocabulary effectively. Android and iPhone apps can help in learning English and strengthen vocabulary. They make learning fun, accessible and intuitive.

Haider (2019:1) argues that there are many apps that enhance English language proficiency and help in learning English language faster as learning a language is one of the most rewarding things one can do. One can improve his/her skills in language by using smart phone applications such as: Hello English app., Hello Talk app., English speaking practice app., Fun easy learn app and Duolingo app.

The current study claims that teaching translation should be developed via using new media, new resources and new web tools that enable students to have tutorial support for their translation assignments. Teachers and educators should pay more attention to the conditions under which technology could be used efficiently including both teacher and students' roles when applying technology in language learning classrooms.

Using some smart phone applications guided by connectivist learning theory in teaching translation could be an effective approach for developing written translation skills and improving English language proficiency for secondary school students.

2. Context of the problem

Throughout the researcher's work as an English language teacher, and throughout her classroom observation of students in many learning situations, she has noticed that secondary stage student's performance does not meet the minimum skills required for the written translation skills and English language proficiency. The researcher obtained the information from the following sources: samples of students' writing; test data on students' performance; reports by teachers and opinions of experts; information from students via interviews and questions; and related literature.

The researcher conducted a needs analysis and needs assessment questionnaire by doing some activities with students to find out their learning needs. The information was collected to determine the current levels of written translation skills and English language proficiency of students, The information obtained could serve as a basis for a particular problem learners are experiencing and for planning the new teaching method by determining performance gaps to identify a gap

between what students are able to do and what they need to be able to do. Therefore, in this study, semi-structured interviews were conducted with 30 participants. Their accounts were analyzed to determine patterns of engagement and factors affecting engagement in the course.

Three distinct levels of engagement were recognized: 1) Active participants; 2) Passive participants; and 3) Lurkers (members who observe, but don't participate, read only participants).

In addition, a number of key factors that mediated engagement were identified including confidence, prior experience, and motivation. This study adds to the overall understanding of learning in connectivism. The findings provide an insight into how the learning experience afforded by connectivism suits the diverse range of learners that may coexist within connectivism.

The researcher had noticed that there are many factors that affect active participation such as lack of confidence, prior experience, motivation, the traditional teaching method which contributed to the weakness of students in written translation skills and low levels of English language proficiency.

Generally literature indicates weaknesses in our students' written translation skills (e.g. El-Touny, 2001; Gabr, 2002; Obaid, 2010; El-Shafey, 2016; El-Sayed, 2018; Roshdy,2018). In this regard, El-Touny's study (2001) discussed the art of translation and stated types of translation. Gabr's study (2002) pointed to the need to teach translation in Egyptian national universities. Obaid's study (2010) pointed to the necessity to develop translation skills. El-Shafey's study (2016) suggested a program based on context clues in improving some translation skills. El-Sayed's study (2018) suggested a training program in developing collaborative translation skills and motivation for

translation. It proved effectiveness of the training program. And Roshdy's study (2018) investigated the effectiveness of a course in developing some translation skills and attitudes towards translation. All these previous studies proved the importance of written translation skills for students.

Moreover, some studies investigated the effectiveness of using connectivism learning theory in teaching for improving learning (e.g. El-Feqy, 2011; El-Hadidy, 2018; Hendawi, 2019). El-Feqy's study (2011) investigated the effectiveness of a teaching strategy in the light of the connectivism learning theory; it proved effectiveness of the strategy. El-Hadidy's study (2018) pointed to the impact of connectivism based blended learning program. Hendawi's study (2019) investigated the effectiveness of a suggested program based on the connectivism theory. All these previous studies proved the effectiveness of connectivism learning theory in improving learning.

Due to the importance of using smartphone applications in learning, some studies employed in modern teaching (e.g. Raab, 2005; Jawarneh, 2017; Taha, 2019). Raab's study (2005) pointed to the importance of mobile phone applications. Jawarneh's study (2017) investigated the effectiveness of mobile learning technology in higher education. And Taha's study (2019) pointed to using various mobile applications. Arabic studies that have smartphone applications in teaching (e.g. Hadhod, 2018; Al-Dosry, 2019; and Hebeesh, 2019). Hadhod's study (2018) designed a strategy using smartphone applications in teaching. Al-Dosry's study (2019) suggested a program based on smartphone applications. And Hebeesh's study (2019) pointed to using journalism of smartphone applications. All these previous studies proved the effectiveness of using smartphone applications in improving teaching.

Some studies pointed to the importance of acquisition of English language proficiency in teaching (e.g. Geranpayeh, 2000; Boraie, 2003; Harker, 2004). Geranpayeh's study (2000) pointed to the importance of English language proficiency testing. Boraie's study (2003) investigated language proficiency test-taking strategies. Harker's study (2004) discussed the linguistic proficiency of English teachers.

In addition, a pilot study (some open interviews conducted with English language teachers and supervisors) indicates that secondary-school students are poor in written translation skills and English language proficiency. This was attributed to their little experience that they have got along with their little exposure to a written translation input, and therefore, they did not possess the ability to translate correct texts.

To measure student's levels in written translation skills and English language proficiency, the researcher conducted another pilot study (It was a task based written translation skills- test and English language proficiency test) (see table 3 below) the results were consistent with some previous studies.

Percentage of success in the English language proficiency test

(Table 1)

high proficiency		moderate proficiency		Poor proficiency	
No. of Students	Success percentage	No. of Students	Success percentage	No. of Students	Success percentage
2	80%	6	50%:55%	22	10%-20%

Among the 30 students, two (2) students indicating high proficiency. Most students lack of English language proficiency skills. This report indicates that low proficiency in English language skills has been considered a barrier to academic success and advancement.

Based on this pilot study, it was concluded that secondary– school students need a written translation strategy to translate effectively and to develop the English language proficiency by training them through using some smart phone applications guided by connectivist learning theory.

3. Statement of the problem

The research problem can be stated as follows:

Al–Azhar secondary stage students have low levels of written translation skills and low levels of English language proficiency during learning activities. Therefore, it is suggested that using some smart phone applications guided by connectivist learning theory would help those students develop their written translation skills and English language proficiency.

4. Questions of the study

The current study attempts to answer the following two questions:

- 1) What is the effectiveness of using some smart phone applications guided by connectivist learning theory in developing secondary–stage students' written translation skills?
- 2) What is the effectiveness of using some smart phone applications guided by connectivist learning theory in developing secondary–stage students' English language proficiency?

5. Objectives of the study

In general, the proposed study aims at applying some smart phone applications guided by connectivist learning theory in written translation instruction and English language proficiency to manage the translation difficulties and problems encountered by secondary– stage students in the English class – This involves accomplishing the following two objectives:

1. Developing secondary- stage students' written translation skills through some smart phone applications guided by connectivist learning theory.
2. Developing secondary- stage students' English language proficiency through some smart phone applications guided by connectivist learning theory.

6. Delimitations of the study

The present study will be limited to the following:

1. A group of some smart phone applications that develop written translation skills: a) Golden Dictionary (EN-AR) app; b) Google Translate app and c) Reverso Context app.
2. Written translation basic skills and sub-skills list.
3. In addition to thirty secondary stage students at Al Azhar institute as the study group. An experimentation period should last during the 2nd semester of the school year 2019/2020.

7. Definitions of terms

The following definitions are presented to facilitate reading and understanding:

1-Connectivist learning theory

According to the present study, the researcher defines connectivist learning theory operationally as "a learning theory that explains how to integrate technology in education and how technology has created new opportunities for people to learn and share across the World Wide Web (www) and among themselves. These technologies include web browsers, email, wikis, online discussion forums, social networks, YouTube, and any other tool which enables the users to learn and share information with other people.

2- Smart phone applications

Saigal (2018) defined smartphone applications as "these Android and iPhone apps that help individuals to learn English and strengthen vocabulary, plus some of them help one to learn other languages, individuals can use mobile applications for learning a language as they make learning fun, accessible and intuitive.

According to the present study and in the light of the above definition, the researcher defines smartphone applications operationally as "a modern scientific teaching method, through which we can provide a lot of interactive applications that help teachers and students to use them in developing written translation skills as well as the development of English language proficiency.

3-Written translation skills

Bell (1991) defined translation as the process through which a text in one language (source language) is replaced with another language (target language), thus translation is seen as a process of equivalence between a source language and a target language.

Darwish (2003) defined translation as a human activity which is performed by translators who use a target language as a mean to reproduce a text originally written in a source language. It is a communication process that involves transfer of a message from a source language to a target language; it includes some activities as analysis, transfer and means of communication.

Abdellah (2010) mentioned four main translation skills in addition to some sub-skills that students need to master in the field of translation, these are: 1) reading comprehension skill; 2) researching skill; 3) analytical reasoning skill; and 4) composing and production skill.

According to the present study and in the light of the above definitions, the researcher defines written translation skills operationally as "those skills and sub–skills that must be mastered by students and translators to apply their linguistic knowledge into practical use. So, it is important to train teachers and students in translation skills as this will benefit them in their linguistic and professional development in addition to improving their English language proficiency.

4-English language proficiency

According to the present study, the researcher defines English language proficiency operationally as the acquisition and use of the four language skills ((listening, speaking, reading, and writing). It provides a better understanding of one's own language and culture; it also enhances students' thinking, cognitive, analytical and social development. To acquire language proficiency, one has to study the rules of grammar, phonology, morphology, syntax, and lexicon.it is a measurement of how well a learner has mastered a language using linguistic skills.

8. Research design

The current study adopts the quasi– experimental research design which is based on using three groups; two experimental groups and a control group, administrating pre–post test and other tools on the study groups to identify the effect of using some smart phone applications guided by connectivist learning theory on developing written translation skills and English language proficiency.

- The control group used the traditional method in teaching written translation skills.
- The first experimental group used machine translation only.
- The second experimental group used the teaching method based on using some smart phone applications guided by connectivist learning theory.

9. Instruments of the study

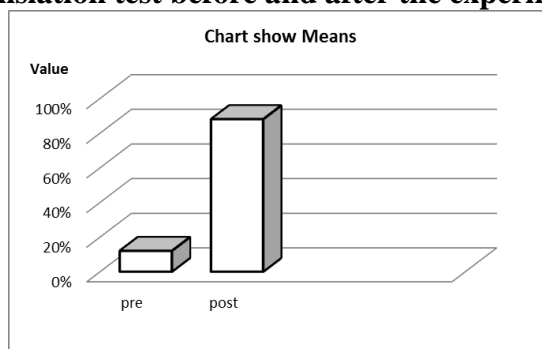
To accomplish research objectives, the following tools will be employed, all of them will be prepared by the researcher:

- 1- Translation basic skills and sub-skills list.
- 2- Written translation Test to assess written translation skills and sub-skills.
- 3- English language proficiency scale to assess language skills.
- 4- Teacher's Guide and students activities.

10. Research Results

Findings of the study were favorably and encouraging as they indicated that the new teaching method had a significant effect on students' scores on the written translation test. Results also indicated that the students' means of scores on the post- test of written translation skills were higher than the means of the scores on the pre- test. Generally, the results presented indicated that the new teaching method had a favorably effect on the development of the written translation skills and sub-skills.

Figure (1)
Difference in the mean scores of the students on the written translation test before and after the experiment



11. Conclusion

According to the research findings, two conclusions come to the surface.

First, teachers should teach smart phone applications and the students should use them actively for developing their written translation skills and English language proficiency.

Second, an increase in connectivism knowledge leads to improvement of written translation skills and sub-skills and English language proficiency.

Based on the results from the previous studies, the researcher can get benefit from the present study as follows:

- 1- In order to overcome students' problems in the academic written translation in a foreign language the learners should use smart phone applications. The applications are categorized as applications that develop translation skills, and applications that develop English language proficiency skills
- 2-smart phone applications helps students be aware of how they translate words and sentences and to read academic materials such as text books.
- 3-smart phone applications increases the learning experience as students know how and when to use applications.

12. Recommendations

In the light of the study results, the researcher recommends the following:

- Providing teachers with training sessions and courses on how to teach using smart phone applications guided by connectivist learning theory.
- Encouraging EFL course designers and textbook developers to devise courses in written translation for secondary stage students.
- Encouraging students to use other smart phone applications guided by connectivist learning theory that could help them improve their learning at math and science subjects.

13. Suggestions for further research

Based on the results of the current study, the following researches are suggested:

- Conducting a study to develop other language aspects through using smart phone applications guided by connectivist learning theory (e.g. grammar, vocabulary, phonetics, morphology and syntax).
- online dictionary skills should be taught to the EFL learners, and the entry structure and information of an online dictionary should be improved.
- It is suggested that dictionary skills training should be provided, and improvements to electronic dictionaries should also be made.

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