Chapter Five: Conclusion
Student's Name
Institutional Affiliation

Chapter Five: Conclusion

Introduction

Modern education heavily utilizes new technologies. Looking at the recent changes in the curriculum and at the very process of teaching in different educational institutions, it becomes obvious that the implementation of the innovations has become an inevitable stage in learning process (Levy, 2009). Much research has been conducted with the purpose of understanding the advantages of information technologies in the education process (Akele, 2014; Wang, Teng, & Chen, 2014). It has already been proven that innovative technologies assist the learning process in terms of providing a greater understanding of the main purpose of any second language studied (Chapelle, 2001). The research is aimed at understanding the effectiveness of technology integration into the studying process. The study showed how helpful information technologies can be in learning process. To narrow the study, the research was directed at the integration of the information technologies into the course instruction for teaching the Iraqi dialect of Arabic language at the DLIFLC for the members of the U.S. Armed Forces. Despite the differences in the formation of technologies and the necessary knowledge required for applying any of the devices, the study measured the effectiveness of technological integration into the lessons. The U.S. Armed Forces and Iraq dialect of the Arabic language were chosen as the instruments for the research conduction due to the necessity of presence of American military intelligence in Iraq for peace maintenance (Omaggio, 2001). The choice of this particular sphere was justified by the necessity and little research in the military sphere and virtually no research related to the Iraq dialect of Arabic as the second language. Focusing on the Iraqi dialect as the primary aspect of research conduction, the study implemented an assessment of the students' awareness of how different information technologies work and how useful they are in the learning process. The use of technologies needed to be considered from the point of view of their efficacy (Carroll, 2001).

The main purpose of the study was to test the attitude and understanding of students from the Defense Language Institute Foreign Language Center about the use of information technology and about the integration of such Apple devices as MacBook, iPad, Blackboard, and SMART boards with the purpose of improving student learning experience. The study was also tested the efficacy of the implementation of the mentioned above devices and to determine whether the integration of technology can increase the effectiveness of second language learning using the Iraqi dialect of Arabic as an example. The study was focused on the following research questions, (1) does the use of technology by students in their foreign language courses improve their comprehension and language skills, in comparison to the face-to face conventional method? (2) How can teachers use technology to motivate students to learn the foreign language? (3) Does the use of technology enhance language retention and student interest? (4) Does the type of program used affect student participation? Which program is most effective in getting students to participate? (5) Does periodic training in the use of technology help students learn the language more effectively?

The study involved the qualitative method of research. Students' expectations were been considered in relation to students' perceptions of the use of technology in the classroom. Additionally, the study involved a test of Apple technologies, such as MacBook, iPad, Blackboard, and SMART boards, to consider how they benefit student learning. The questionnaire and interview are the instruments used for data collection. The choice of the methodology is justified by the fact that questionnaires and interviews help gather valuable information through unavailable statistical sampling techniques (Hoepfl 1997). Also, non-numerical results and effectual sentiments of students can easily be analyzed in the discussion section (Tracy, 2012). Having carried out the study at the Defense Language Institute Foreign Language Center in the Arabic-Iraqi Dialect Department, a total of 40 students were selected as the research sample, 20 females and 20 males. The interview lasted for about 15-20 minutes depending on the completeness of the respondents' replies and the questionnaires

lasted about 5-10 minutes since no specification was required and students' main aim was to select an answer among the existing ones.

Discussion

Discussing the research results, it is important to state that an equal number of males and females have been selected for the research to guarantee equal participation for both men and women since several studies pointed to the possibility of gender differences in terms of attitudes (Coutinho, Oswald, & Best, 2006; Maurer, 2011). Initially, the students were offered testing either in standard Arabic or in the Iraqi dialect of the language. Most of students (35 respondents) preferred to reply to both the questionnaire and the interview questions in Iraqi dialect, which indicates the high level of knowledge obtained in the language center. Since the research was conducted as a part of their post-graduate education, the respondents were requested to state their level of education. This information was important since the prior levels of education are important indicators for further studies (Betts, Ferrall, & Finnie, 2013). Thus, most of the respondents have graduated from the high school; however, those who held a GED, Master's, Associate and Bachelor degrees also took part in the study. Since age affects the information perception (Meneghettia, Borellaa, Gyselinck, & Beni, 2012; Scharenborg & Janse, 2013), it was significant to consider respondents' age, which was below 30. Overall, the analysis was done for 15 questionnaire questions and 10 interview questions.

The first questionnaire open-ended question was related to the usefulness of technological devices in learning a new language. Every participant agreed with this statement, which allows for the reasonable conclusion that most students in the modern world use innovation devices for learning new material (Godwin-Jones, 2011). The students made reasonable requests and provided clarifications about why devices are effective in learning language. The possibility to strengthen knowledge is one of the main reasons for using the

information devices since students can develop language skills by means of repeating the

heard material and listening to different original texts while walking or running (Bruton,

2011). Additionally, information technologies help students to remain on track and interact

through discussion board messages and ask for help without having to leave the home

(Garrett, 2009). In other words, the use of information technologies is easy and convenient

(Hussain, Niwaz, Zaman, Dahar, & Akhtar, 2010).

The second question was aimed at understanding the type of technology students

used. Students reported experience in using hardware, PC compatibles, and iPod equally. The

preference to any of the stated devices was supported by the previous experience in using the

technology (Meskill & Mossop, 2000; Fleming, Motamedi, & May, 2007). Many students

had already used the devices before, and when reflecting on their past experiences they

identified the device that was most suitable for them. The way students developed their

experience in technology use was asked in the third question. Thirty-seven respondents had

developed their experience by using the technology for personal needs. Personal interest was

identified as the primary reason for using their devices. A smaller number of students

developed the necessary skills in device use in the school and even fewer developed the

necessary skills at work. Therefore, personal interest was considered the main motivation for

technology use. Students understand the importance of innovation in the modern world and

therefore want to develop their skills individually. Neither age nor gender affected the ways

that students developed their information technology skills.

The next open-ended question evaluated the prior experience of students in using

Apple computers. It is notable that Apple computers were not the first devices that students

became familiar with; 37 respondents had previously used other devices before Apple

computers. Among the technologies used in the past, students enumerated the following ones

in their responses to the fifth question in the questionnaire, SMART Board, Sakai

(Blackboard), iPod, MacBook, iPad and PC computers (Mondahl & Razmerita, 2014). Further, the questionnaire asked directly about the Apple devices used by the students with the purpose of assisting in learning the Iraqi dialect. Most of students used Apple devices. It is significant to note that six women responded negatively to this question. It may be considered as an indication that women are less confident in technology and do not use it if alternatives are possible (Demiray, 2010). However, having another purpose of the research, the results of this question indicate that people are interested in technology for studying and particularly for learning language. The next question was aimed at specifying whether people used the devices of other companies or if they simply ignored the technology. The six students who rejected the use of Apple devices stated that they used the technologies produced by manufacturers other than Apple. No results have been obtained about the companies students referred to. Trying to understand which particular Apple devices students prefer, it became obvious that MacBook was reported as the most convenient and the easiest tool. However, those who used iPad had also stated that it was the easiest and the most convenient device to use. Students used mobile technologies and they confirmed the fact of their appropriateness for language learning (Pereira & Rodrigues, 2013). Using MacBook, students showed a serious attitude when it came to the role of technology in language learning (Kim, Rueckert, Kim, & Seo, 2013).

Assessing students' motivation in learning the Iraqi dialect, the following results were obtained. Since MacBook was selected as the most convenient device, it was not a surprise that most of the respondents would choose it as the technology that motivates them for learning. Students also reported that MacBook made it easier to access the Internet and to share information. Additionally, students usually considered the choice of device as a motivation to apply themselves in class (Levy, 2009). However, the choice of devices that assisted as motivators also included SMART Board, iPad and iPod. In regards to the question

about the relation between training in devices use and increased level of motivation, only a few students replied positively. Therefore, it can be concluded that students are not interested in additional training to increase their interest in a subject. Most of the information has already been obtained personally, due to their studying or professional needs (Dobozy, 2012). Even though trainings do not motivate students to study, they still considered them useful for gaining knowledge of technology in general and showing students new ways to study another language (Thorne & Smith, 2011).

Technology devices should be considered as tools. Students do not consider devices as motivational strategies. The overuse of technology may lead to distractions from study and therefore cannot be considered motivational at all. Most students use devices all the time during the class, which speaks about their helpful nature and convenience not only at home preparation but also in class learning. Trying to understand whether students consider technology a barrier on the way of gaining knowledge, a question was asked about the benefit of the devices use. Almost all of the students agreed that technology use is not a barrier to gaining knowledge. In fact, 33 of 40 the students agreed that devices are beneficial in learning a new language. Nevertheless, some students contended that technology could be harmful if it is used on early stages learning (Ashman, Brailsford, Cristea, Sheng, Stewart, Toms, & Wade, 2014). Since the use of technology is considered beneficial, the help in listening and speaking skills cannot be denied. Thus, students' observations confirmed the fact that devices are useful for learning another language by means of listening to authentic texts, recording personal voices and hearing the records to check for mistakes, watching video, and communicating in the target language in social media (Padrón & Waxman, 1996). Those who did not see any use of Apple computers in developing listening and speaking skills insisted that those were just the tools.

Analyzing Apple computers and applications as a tool in learning Iraq dialect, students were asked to assess their disadvantages. Among those listed in the questionnaire, students enumerated the following disadvantages of Apple, price, difficulty in software access, and finding them to be not user friendly. Even though Apple computers have disadvantages as a tool for learning a second language, students did not identify any issues that needed to be added or corrected (Kim, Rueckert, Kim, & Seo, 2013).

Hypothesis Testing

The research was directed at testing two main hypotheses related to students and teachers. The first set of hypotheses was related to students and their learning process. Before conducting the interview and the questionnaire, the null hypothesis was as follows, "The integration of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language will not increase the effectiveness of second language learning for the students". Thus, the alternative hypothesis was as follows, "The integration of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language would increase the effectiveness of second language learning for the students". To test this hypothesis, three research questions were set at the beginning of the study.

The students' answers to the interview questions indicated that although the technological devices have a number of disadvantages and do not always motivate students to learn, they still remain an effective contributor to the students' learning process. Students reported that by using the information technologies, they could access information faster. Moreover, they could share ideas without leaving their homes which increased the effectiveness of learning. The use of various applications helps students become more involved in the cultural peculiarities of the country whose languages they study. It has been proven that people learn language faster when they appear in adverse environment. Videos and audio records applied with the use of information technology allow students to remain

involved during the course of their regular daily routines. For example, iPods allow students to listen to the audio while walking, driving, and even when falling asleep. Students can also see videos whenever they want.

Along with using of different devices in class, the students have access to the same information at home, which helps them review the material faster and with a higher efficacy. By using PowerPoint, Microsoft Word, Excel, Smart Board, Adobe, and MS Outlook, students are able to perform different types of tasks and projects. Students can refer to different tasks to avoid boredom and to study at a foreign language from another angle. One more very important aspect in favor of success in the integration of technology in the curriculum and instruction of the Iraqi dialect of Arabic is the availability of the technological devices and students' awareness of how to use them. Even though some information technology can be complicated to use and requires some additional knowledge, none of students needed an introduction to technology use and most of the students refused to have any training at all. Therefore, the research conducted among US Armed Forces students in Defense Language Institute Foreign Language Center lead to the rejection of the null hypothesis. Thus, the alternative hypothesis was confirmed, which states that the integration of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language would increase the effectiveness of second language learning for the students.

The research results can be used to clarify an important issue. When considering the question of the effectiveness of teaching with the use of technology, students responded positively. The research showed that if the innovations are applied for teaching purposes, the information will be easily and more quickly shared between teachers and students. It is more effective to receive the completed tasks via email rather than wait for students in a classroom to provide hard copies. Technologies should be used in the classroom on the same level with traditional teaching.

As another benefit, information technology may help students recollect everything easier and faster. Also, teachers can be contacted online to seek out clarifications. It has become a common practice to communicate either via email other applications or software, which allows a closer interconnection between teacher and student. One of the main confirmations of this statement is a set of answers to an interview question about the teacher's choice of a device to use in class, either iPads or SMART boards. Most of the respondents referred to use SMART boards because it guarantees higher interaction between teacher and student. Therefore, the support of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language in teaching has been confirmed by the research results obtained while studying. This information allows for the rejection of the null hypothesis, that the integration of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language would not increase the effectiveness of second language teaching. Therefore, the alternative hypothesis was supported by the integration of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language would increase the effectiveness of second language teaching.

Conclusions

The research under analysis has been devoted to a number of questions. In testing the effectiveness of the integration of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language for learning and teaching second language, the study has considered the following research questions: Does the use of technology by students in their foreign language courses improve their comprehension and language skills, in comparison to the face-to face conventional method? How can teachers use technology to motivate students to learn the foreign language? Does the use of technology enhance language retention and student interest? Does the type of program used affect student participation? Which program is most effective in getting students to participate? Does periodic training in the use of

technology help students learn the language more effectively? Having answered these questions, it became possible to reject the null hypotheses stated in the beginning of the study. Moreover, the questionnaire and the interview questions were developed with the purpose to answer the questions under analysis.

In answering the question about the role of technology in learning the Iraqi dialect for improving student comprehension and language skills in comparison to traditional method, the research results confirmed the effectiveness of information technologies. Listening and speaking skills can easily be developed with the help of technology devices. For example, students reported using iPod when going for walks. Students can listen to dialogues on different topics and learn vocabulary words that positively influence the understanding of foreign speech. In addition, by watching videos about a country of the target language, students can become involved into the cultural peculiarities of the country, which also contributes to comprehension and language skills development. A teacher cannot accomplish this on his/her own, especially if he/she is not a native speaker and a target language is also a second language for him/her. Using Macbook, teachers can use software such as PowerPoint, Microsoft Word, Excel, Smart Board, Adobe, and MS Outlook for better comprehension of the material by students. Traditional methods cannot substitute these technology devices and the research has proven this.

When asking students about how information technology and devices motivate them for learning the foreign language, some students replied that those are merely tools and do not provide any motivation on their own. Such a research outcome is very important, as previously studies have suggested that information technologies do have a positive effect on motivation (Deyrich & Dyson, 2006). Such conclusion put into question all previous research results that tested the hypothesis that devices motivate students to study. It has been proven to be not relevant in some cases. Even though some students still believe that technology

devices provide motivational for students, teachers need to reconsider their attitude to the role

of technology in the learning and teaching processes.

In order to understand whether the use of technology enhances language retention and

student interest, four interview questions were asked. In drawing conclusions, the research

indicates that informational devices are considered helpful from the students' perspective.

Apart from easy access to different sources with valuable information, students can always

turn either to a teacher or to students for help online, without leaving home. Such programs as

PowerPoint, Microsoft Word, Excel, Smart Board, Adobe, and MS Outlook can easily

enhance students' interest in learning a new language. MacBook, Sakari, iPod and iPad are

the technologies which have been reported by students as helpful while language studying.

Students today are used to communicating online as a substitution for face-to-face

communication. Since students still use their social nets for personal needs, they will be more

likely to refer to studying material using technology devices compared to traditional books.

Information is the main source of knowledge and depending on the source of data, it can

serve the interests of students. The use of information technologies provides an opportunity to

search for more information. Since students are aware of the most widely spread technologies

and programs, the study did not find any problems connected to the students' awareness about

any program. Even though most students are interested in using technology while studying

languages and report about their attentive attitude to the issue, these are students who do not

support the use of information technology as those are more convenient for them.

Even though none of students reported about a program that could affect student

participation in the learning process, students still shared their preferences to some particular

programs. The most commonly used devices are MacBook and iPad, while teachers and

students both selected SMART board as the most convenient and student-friendly device.

One of the main peculiarities of this technology related to the ease in use both in class and at

home without the necessity of keeping folders or transmitting any data. In most cases, all of

the information was saved on a particular site where students could log in and check

everything that is necessary. The research results help to conclude that due to the spread of

information technology and high personal interest in different devices, additional training

would not affect students' involvement in learning process since all of the students have

already used many of the devices and could easily learn how to learn how to use a new one.
Therefore, the following conclusions can be drawn from the research. First,

technology can improve student comprehension and language skills in comparison to

traditional teaching methods of teaching. Second, teachers should not use technology for

motivating students because it does not work. It is necessary to develop other means of

motivation to assure that students are interested in studying the material. Third, students are

interested in the use of technologic devices during classes as they can enhance their learning.

Fourth, SMART board is the best program according to the students; however, they can also

use other programs. So, the type of program used for classes does not affect student

participation. Finally, periodic trainings do nothing for students as most of them have already

become familiar with different devices and programs due to personal needs. Even though

some strategies do not work with students in relation to learning and teaching a foreign

language, the use of technologies is effective if integrated in the curriculum and study

instruction. Similar points have been stated while developing the theoretical frameworks.
Overall, the research has shown that the use of information technologies and devices

is effective in learning a new language. Having obtained the results from the Army Forces

students who studies Iraq dialect of Arabic language, the research results can be applied to

any other educational establishment where any language as the second language for students

is studied. Despite the fact that the use of technology does not motivate students for learning

and devices are considered by students as tools only, they are still greatly interested in using

these particular tools for learning a new language in combination with traditional strategies.

The research results indicate that information technologies do not only develop speaking,

writing, listening, and reading competence in a foreign language, information technologies also help to comprehend a new language by means of studying texts and being involved in the culture of the country whose language the student is learning. Students learn not only the language, but the whole culture in a block of information, which is very useful in understanding the text in comparison to simple learning of the sounds, words, and grammar.

Recommendations for Further Research

Further research should be conducted in the same setting with a greater number of students to enlarge the sampling and to assure that the research results can be generalized. This research should be considered as a pilot study since 40 students is a small sample for serious consideration of the research results. Paying attention to the fact that the effectiveness of the integration of a new technology is studied, similar research should be conducted in two and five years to assess the short-term and long-term outcome. When assessing the level of improvements of teaching and learning language in two and five year periods, quantitative research should be conducted. By using different statistical methods, it is possible to determine how the involvement of the information technologies has affected learning and teaching outcomes. This method will not only provide a personal assessment of the data (which is also important), but will also result in very detailed and reliable information about the use of technologies in the educational process.

Another research study can be conducted with the comparison of using different devices and applications. It is important to determine which device is most useful, iPad, iPod, or MacBook in learning Iraq language. The research may be conducted with the involvement of studying any foreign language. To receive credible results, in addition to using qualitative methods, quantitative methodology should be used in order to assess the outcomes. This research has shown that gender and age may play a role in the desire and the effectiveness of using technology in teaching and learning. Therefore, more research should

be conducted to uncover how gender attitudes can affect the learning outcomes and teaching

strategies. Also, age factors should be tested to see whether or not people of older age have

more difficulties in perceiving information from the technologies. Age and gender do play a

great role in the educational process since the perception of information of men and women

of different ages differs and the implementation of the technology may affect the process of

education. The analysis of the research results may help understand how information

technologies can be applied in different cases.

Information technologies affect different spheres of human life and education. After

conducted this research, it became obvious that further studies must be conducted to assess

the relation between technological devices and students' motivation to attend classes.

Moreover, the study must be conducted to check the relationships between the technology

and the time students spend on learning material at home. In terms of the teachers' work, the

relationships between the devices and the time teachers spend on planning the lessons should

be considered. All of these measurements can be used to understand to what degree

information technology is important and effective for learning and teaching second languages

as students have stated in this research. The use of a quantitative research methodology would

be most effective to answer this.

One more research can be conducted with the purpose understand the role of online

discussion boards and forums in the learning progress. Many teachers use discussion boards,

but not many of them think about their harmful effect. Having created a separate theme on a

forum, students can not only share ideas, but also have the ideas of other students. The

internet may be considered as a provoker of plagiarism and steeling the ideas. Therefore, the

research should be conducted in order to test the positive and negative effect of forums and

discussions on students' thinking abilities. Students' individuality can be lost in a great

variety of online information and behind the use of technological devices.

Recommendations for the Profession

The under analysis has contributed greatly to the teaching as a profession. Having considered the research results of the study, teachers can draw the conclusion that the integration of technology in the curriculum and instruction increase the effectiveness of learning the Iraqi dialect of the Arabic language. In order to better learn the Iraqi dialect, students can use iPod for listening to different tracks about the country itself. Naturally, the audio dialogue must be in Iraq dialect.. It is also important to assure that native-speakers read the text to students. Audio material can help students develop their listening skills and the understanding the cultural perspectives of the country. The same may be considered with the help of video files. Teachers must assign different videos about the country whose language they study either at home or in the class. The research results are also helpful for a teacher when developing the lessons and planning different activities. Teachers should refer to SMART boards in their teaching method, as this device is the most convenient for students in terms of functionality. The same could be said about MacBook. Students prefer to use this device; therefore, it is important to use the applications and programs that match it. Even though iPad and iPod are in use, students still prefer to use MacBook because it is more convenient for them. The information obtained from the research results of this study will help teachers develop their lessons that best meet students' needs and desires. Developing lesson plans, teachers should remember to use programs such as PowerPoint, Microsoft Word, Excel, Smart Board, Adobe, and MS Outlook. These programs can add variety into the lessons and can lead to higher interest and motivation when doing the homework. The issue of motivation has been considered in the classroom and teachers should remember that many students consider technology as a recreational tool, so they are to think about other motivational methods, not just the use of devices.

Reflections

At the stage of planning the study, I was inspired by the future study. Having set the goals, I understood how important the question was to me. This research is very personal to me because I want to be a teacher the future. Thus, I was also interested in the research outcomes. When starting the research, I paid much attention to the literature to understand whether my research was unique. The information I gathered during the literature review helped me consider the problem more deeply. Fortunately, the data analysis did not take too much time as this was the information I strived for. Overall, the whole research was easy although it was also time consuming and I spent much effort to assure the reliability of the results. The data collection was the most complicated issue as before this I had to find an appropriate number of respondents who were willing to take part in the study. Furthermore, I had to conduct the questionnaires and the interviews. However, because I wanted to understand how technology affects the learning process, I became really involved in the research. The outcomes of the study are very important for the modern curriculum and the integration of the technology can change the whole process of learning any second language. Teachers from all over the world should pay attention to the research results, as the outcomes are significant. Not much research has been conducted with the purpose to see students' attitude to technological devices. The research results obtained from studying the outcomes of the integration of technology in the curriculum and instruction of the Iraqi dialect of the Arabic language can help other teachers increase the effectiveness of teaching and learning second language. Overall, the work on this research was a great challenge for me. I have managed to apply my knowledge of the research conduction in practice. This is my first extended research of such value. That is why, it is important to see how the research results help me to integrate my ideas into the learning process. The idea that the further research is necessary on the basis of my study is a great appreciation of my work. Having understood an importance of the research conducted, it appeared that the time and effort were not spent in

vain. I spent much time on synthesizing and analyzing the research results, so the revealed

outcomes must be used in the further discussions for improving the learning and teaching

processes applied for studying the second languages.

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