

ENHANCING LEARNER AUTONOMY BY INTEGRATING TECHNOLOGY AMONG ENGINEERING LEARNERS

^{#1}Gandhimathi, S.N.S. and ^{#2}Anitha Devi, V.

[#]School of Social Sciences and Languages, VIT University, Vellore, India

¹gandhimathi.sns@vit.ac.in

²vanitadevi@vit.ac.in

Abstract - The 21st century learners strive to be autonomous and seek more responsibility. They expect and demand too much and too soon from the world. Since they are technologically savvy, they rely absolutely on technology for communicating, watching movies, listening to music, playing, etc. The learners are pleased if the teacher guides them in using their laptops, i-pads or mobile phones, to practice English when they are commuting or in their spare time. This study was intended to find out whether there was any improvement in the acquisition of L2 among first year engineering learners, when learning was integrated with technology. The sample for the study comprised 60 learners of VIT University, Vellore. A Pretest was conducted in the entry level of the course and posttest was conducted to check their progress in the posttest. The learners were exposed to a range of activities after the pretest and the analysis was done through SPSS version19. The result of the study revealed that the learners show a significant progress in the acquisition of L2, when blended-learning approach (Driscoll, 2002) was adopted by the teacher than traditional method.

Key words: Autonomous learners, Blended-learning, Traditional method

I. INTRODUCTION

The fast-paced growth of technologies has entered the domain of second language acquisition through the technology-supported pedagogies (Beetham, H., & Sharpe, R. 2013). The web opens up opportunities for language learning by enhancing the learners' linguistic ability and language ability. It provides the learners with extensive sources of authentic input materials that are immediately available with constant up-to-date information (Lafford & Lafford, 1997) through which the learners can be aware of the culture of the target language and will have opportunities to use the language they are learning in productive ways to converse with other speakers of the target language (Moeller, 1997). The Gen Yers (Prensky, M. 2001) are used to exploratory learning and they always endeavor to be highly independent because they live in a planet where technology permeates every aspect of their lives. So it is necessary for the teachers to take a step back and encourage autonomous learning. This article explores how technology can be integrated to aid the process of English language learning

II. BLENDED LEARNING

The digital native learners anticipate their teachers to create a learning environment that includes technology since it is an intrinsic part of their lives. According to iNACOL, the International Association for K-12 Online Learning, blended learning is, combining online delivery of educational content with the best features of classroom interaction and live instruction to personalize learning. In a similar way, the Sloan Consortium, an organization dedicated to integrating online education into mainstream education, defines blended learning as part online and part traditional face-to-face instruction. Blended learning is implemented in various ways, ranging from models in which curriculum is fully online with face-to-face interaction to models in which face-to-face classroom interaction includes online components that extend learning beyond the classroom. Online tools were used to supplement classroom instruction and tailored learning experiences were made possible for students based on their needs.

A language teacher has to meet the needs of the learners who are all technocrats Nixon, J. (2004) growing up within a progressively more globalised world. Since the learners prefer to practice language in their idle hours and according to their own learning style, it is really challenging and a necessity for a language teacher to think of innovative approaches to be employed to address the learners' proficiency level. According to Wang, L. (2005), integrating technology into the language classroom not only saves time and work but also inspires creativity and brings opportunities to learners, connecting them to new ideas and people. In language teaching and learning, technology plays a vital role and is used for multipurpose. The learners can access information, get exposed to the target language, both written and spoken, create text, publish their work, communicate with other language learners, and build community. It is a vastly engaging and interactive tool for both the teachers and learners of English as a second language. When technology is integrated into the

curriculum, it gears the learning process and supports four key components of learning: opportunities both inside and outside the classroom, commitment in group projects, frequent interaction and response, and alliance with real-world experts (Staff, E.2008).

III. REVIEW OF LITERATURE

Integrating technology into the language learning has been an area of discussion among educators for over thirty years. Literally thousands of articles (EBSCO Publishing, 2011) have been published recommending effective strategies to support a learner-centered and learner-directed curriculum (Becker and Riel 1999).

In a study intended to examine the usefulness of Web-based teaching in the writing of freshman EFL learners, Al-Jarf (2004) found that the use of Web-based lessons as a supplement to traditional in-class writing instructions was notably more successful than teaching which depended completely on the textbook. The experimental group of learners got online instruction from the researcher and posted threads, short paragraphs, stories and poems on a discussion board. They were eager to receive comments not only from the teacher but also from the other learners.

In another study, Hertel (2003) motivated the learners to use e-mail. U.S. learners in a beginning Spanish class and Mexican learners in an intermediate English as a Second Language class corresponded every week for one semester with e-mails. Survey results showed this learner-centered attempt had the potential to change cultural attitudes, increase knowledge and awareness of other cultures, promote language acquisition, as well as enhance student interest and motivation in language and cultural studies.

Chinnery (2006) described the usefulness of mobile- assisted learning (MALL). According to him cell phones are useful for practical or administrative matters, such as basic student-teacher communications (e.g., course updates and reminders) and referrals to related websites and other up-to-date teaching resources. He says, "While the applications of cell phones have typically been pedagogic in nature, they have also been used for practical or administrative matters, such as simplified and flexible student-teacher communications (e.g., course updates and reminders) and referrals to related websites and other up-to-date teaching resources".

KuKulska Hulme & Shield (2008) emphasized that the use of mobile devices in the classroom had made language learning becoming more informal and personal. They tried to discover the usage of mobile-assisted language learning (MALL) in collaborative learning.

According to Foulger et al., (2009), MySpace and Face book were ground-breaking digital communication tools that go beyond traditional means of social interaction. In their study, among 50 learners, 48 respondents were familiar with social networking sites such as MySpace or Face book, and 44 (88%) reported that they have an account. The remaining two learners who were above 40 indicated little or no familiarity with social networking sites.

Moran, Seaman and Tinti-Kane (2011) divulged that 90% of faculty members were using social media in courses they were teaching or for their professional careers outside the classroom. Among all the social networking sites, Face book and LinkedIn were the frequently visited sites for social and professional connections. Meanwhile, YouTube stood at the second place of its usage.

Social networking site usage and adoption from a new survey from the Pew Research Center's Internet Project by Duggan and Smith (2013) reiterated that 42% of online adults used multiple social networking sites, but Face book remained as their best choice. Stiffy Sunny et al., (2013) proved that e-learning motivated the learners to interact and learn. They also provided a best way for the e-learners, i.e., using filters, to blog effectively.

IV. RESEARCH PURPOSE AND QUESTION

In the turn of the 21st Century, rapid technological change, generic skills, flexibility and aptitude to learn how to learn are at a premium. According to Dickinson (1987) autonomy is the condition in which the learner is totally responsible for all of the decisions concerned with his learning and the implementation of those decisions. He also used the term "full autonomy" to describe the situation in which the learner is entirely independent of teachers, institutions or specially prepared materials. To make the learners independent, it is necessary for the teacher to promote their autonomy, as learners and users of language and technology. Though learners are adept in using hand-held devices, such as notebook PC, mobile phones, digital cameras, tablets, mp3 players, e-book reader, and voice recorders, it is the responsibility of the teacher to make the learners use the devices effectively for learning purpose by showing the learners how to use reference tools, such as dictionaries, corpora, concordancers, thesaurus and phonemic charts. Some of the activities used by the researchers are discussed in this article. The present study, as such, aimed at exploring how technology can be integrated to aid the process of English language learning among the first year engineering learners. Based on the aim of the study the following research question was formulated.

Research Question

Does integrating technology into the language classroom have positive effect among engineering learners?

V. SUBJECTS

The participants in this study were 60 undergraduate learners of VIT University. They belonged to first year engineering programmes. Since the university follows Fully Flexible Credit System (FFCS), the subjects were from various engineering programmes such as, Electrical and Electronics Engineering, Electronics and Communication Engineering, Civil Engineering, Mechanical Engineering, Production and Industrial Engineering, Computer Science and Engineering, Biomedical Engineering, Biotechnology, Electronics and Instrumentation Engineering, and Information Technology. The 3,500 learners who were admitted in the academic year (2013-2014) were streamlined with the help of an online English Proficiency Test (EPT). Learners who did not perform well were made to enrol for a course titled, "Effective English". After completing Effective English, they had to enrol for the course, "English for Engineers I" and finally for the course, "English for Engineers II". The learners who performed well in the EPT, directly enrolled for the course, "English for Engineers I". Though 660 learners enrolled for the course, "Effective English", only 60 learners were selected for the present study. They were non-native English speakers. The subjects were not only from various states of India but also from other countries like China and Pakistan.

VI. METHODOLOGY AND TOOLS

The experiment was conducted for 14 weeks. Initially 60 learners enrolled for the course but for some personal reasons 2 learners dropped out of the university, even before writing the pretest. Of the remaining 58, there were 42 male learners and 16 female learners. They took pretest and after the training they also took posttest. The components for the pretest and posttest included Preposition, Connectives, Cloze Test, Dialogue Writing, and Story Writing. Since these components were also part of their syllabus, the researchers included these components so that it would also be useful for them to write their final exam.

The teachers and learners always have freedom to use Laptops, Tabs and Mobiles for enhancing teaching-learning, projects, and research both inside and outside the classroom. The teacher can open up learning to the real world, beyond the precincts of the classroom. The teachers are also allowed to access the Internet inside the classroom. The researchers made use of these opportunities to find out the effects of integrating technology into the language classroom. The researchers incorporated activities into the course after the pretest. Their progress was analyzed using t-test, with the help of Statistical Package for the Social Sciences (spss) version 19.

VII. ACTIVITIES

In the past, Internet served as a huge resource library but the present generation is not satisfied in viewing the content passively, they want the Internet to respond to them. Web 2.0 site allows them to interact and collaborate with each other, as creators of user-generated content in a virtual community. Web 2.0 includes blogs, wikis, video-sharing sites and social networking sites like face book and twitter. (Gupta, S., & Seth, A. 2014). Children and teenagers mostly say what they think (Stanley, G. 2013). During an informal discussion about integrating technology into the classroom, the researchers received a comment from a student saying, "Majority of the teachers use PowerPoint while teaching and they think they are stupefying, but it makes me tired looking at it throughout the day." From this statement, it is explicit that the learners like to present and share their views; they hate to sit watching the slides passively, in the classroom. They always seek avenues of self-expression. If the teacher creates opportunities for the learners to speak their mind and share their thoughts with the rest of the world, it solves twin purpose, i.e., motivating them to communicate and retaining their interest. The digital natives are crazy about Whatsapp and Selfie (self-portrait photograph). The teacher should encourage the learners to use Whatsapp and Selfie for learning purpose. They can also be allowed to make small movies or audio files and share with their friends. This ability to engage multiple senses through technology can have a great impact in the classroom. This is especially useful for large class when opportunities for learners to practice are limited. Some of the activities that were implemented by the researchers are discussed below:

TABLE 1: ACTIVITY

Main Goals	Describing Location
Learning Focus	Vocabulary; prepositions
Technical Requirements & Software/websites used	A laptop with internet access, Projector and Digital Cameras or cameras on the mobile phones. http://www.agendaweb.org/grammar/prepositions-exercises.html
Preparation	List of historical places that can be found in the town
Procedure	First, the teacher exposes the learners to various prepositions and makes them do exercises on preposition using the website in the classroom and then, the learners work in teams of four and find a number of historical places in the town and take selfies. They send their selfies (the photograph of the learners with the statue, object, etc.) to their classmates using whatsapp. In the classroom, the learners describe their photographs, saying where they found those monuments, temples etc. and their historical relevance.
Note. Adapted from Stanley, G. (2013)	

TABLE 2: ACTIVITY

Main Goals	Raising awareness of grammar; revision of tenses; encouraging learners to correct writing
Learning Focus	Articles and Connectives
Technical Requirements & Software/websites used	Laptops/netbooks/tablets with internet access http://l.georges.online.fr/tools/cloze.html
Preparation	Learners write a paragraph on a general topic
Procedure	The learners write a paragraph on a general topic like 'open book examination system'. After it is code corrected (g = grammar sp. = spelling, t = tense) by the teacher, the learners work in pairs, helping each other to correct their texts. And then, the learners use the website and generate cloze test by focusing on a particular language item (articles, prepositions, linking words, etc.). Finally, the generated cloze test is shared with their friends and they try to fill the blanks.
Note. Adapted from Stanley, G. (2013)	

Among the 58 learners chosen for the study 37% of the learners were from Andhra Pradesh. Majority of the learners had Telugu as the primary medium of instruction in their schools and told they were not aware of prepositions. For learners of other states and country like China, Prepositions pose more difficulty than any other part of speech, since they are little words that never change in form and are pronounced softly in unstressed syllables. Prepositions of place, manner, and time with examples were taught in the class. The learners also got confused when a preposition indicates more than one meaning or relationship. So they were taught the difference using examples like, we rested *after* dinner (later than), the cat is *after* the mouse (in pursuit of), he was irritated *after* the way she behaved (because of), this is a painting *after* Picasso (in the style of), she worked night *after* night (continuously). After they become aware of the use of prepositions in a sentence, they were asked to visit historical places during the weekends and send the selfies using whatsapp to the teacher and their friends. Learners who did not have smart phones shared with their peers. Their photos are copied in the teacher's laptop and projected in the class. Each team narrated about their visit to the class. Eg. Our team went to Vellore Fort last Sunday, It was a huge 16th-century fort situated in the heart of the Vellore City,.... ..Learners had difficulty in using the article 'an' before vowel sounds. They get confused between the letters a,e,i,o,u and vowel sounds, for eg. Instead of 'a university' they say 'an university' (blindly using 'an' before the letters a, e, i, o, u). They were taught consonants and vowels using phonemic charts. They were explained why 'an' is used before vowel sounds and not before consonant sounds with examples. After they become thorough with articles, the researchers focused on connectives. In the pretest, the learners were asked to write a paragraph on 'social media'. It was found that 80% of the learners wrote without any cohesion. The researchers brainstormed a number of connectives with the students and used flashcards. The list of connectives used in the flash cards is given below:

- Time: when, just as, while, as long as, since, until, every time, after, before
- Manner: by, with, as if, as though, like, as
- Cause: as, therefore, yet, as a result of, consequently, so as, because, since

- Condition: although, unless, if, otherwise, still, despite
- Sequential: firstly (secondly, thirdly etc), finally, then, here, next, when, now, lastly, meanwhile

Learners felt easy when they learnt connectives with examples. Next, the learners were divided into small groups and were given a picture card and a series of single sentences. They were asked to sequence the sentences by relating to the picture given. After they completed few tasks, they were given worksheets to learn and practice articles and connectives. Finally, they were encouraged to write two paragraphs and type them in the website given in table, 2. The learners generated cloze test and made their friends fill the blanks with articles and connectives. For writing paragraphs and generating cloze test 50 minutes is allotted for the learners.

In the pretest, it was found that the learners were unable to express their thoughts in easy and natural constructions. They had difficulty in sentence construction because of the influence of their first language and lack of exposure to the second language. They failed to use contractions like “don’t”, “shouldn’t”, “can’t”. They used long sentences instead of using phrases. First, the learners were made to listen to short conversations using the <http://downloads.bbc.co.uk/worldservice/learningenglish/>. Next, they listened to long conversations with the help of the same website. While they were watching and listening to long conversations, the audio was paused frequently and they were asked to guess the conversation. In some exercises, they were also asked to assume the roles and complete the conversations. For e.g., “Imagine that you were the secretary of your Cultural Club, and you were asked to interview an actor visiting your University. Ask him/her about these things: family, home, hobbies, ambitions, and plans for the future”. The learners used their dramatic power since the writer had to put himself/herself, inside two imaginary persons so as to make them express their opposite opinions naturally. They made a plan or outline of the dialogue before writing the actual dialogue. Finally, they were introduced to the website <http://www.voxopop.com/>. They were asked to listen to what people said on the chosen topic (e.g. teenagers) and then they created their own discussion.

TABLE 3: ACTIVITY

Main Goals	Dialogue; engaging learners in discussion
Learning Focus	Fluency; learners begin a discussion about some topics that interests them and respond to their classmates’ discussions
Technical Requirements & Software/websites used	Laptops/netbooks/tablets with internet access, speaker or headsets (microphones or earphones). http://www.voxopop.com/
Preparation	Choosing an audio-voice forum website
Procedure	Teachers introduce audio-voice forum to the learners by making them choose a topic of their interest. Next, they listen to what people said on the chosen topic (e.g. ‘teenagers’) and then they try to create their own discussion.
Note. Adapted from Stanley, G. (2013)	

Though the learners belonged to engineering programme, creative writing exercises made them learn the second language with interest. According to Tompkins (1982) the young learners must be motivated to write short stories because it entertains and kindles their imagination. It motivates them to read according to their wish. The learners will also have a chance for artistic expression in their writing. The learners’ creativity got developed when they encountered activities that persuaded their curiosity and inquisitiveness. Instead of compelling them to read a short story the learners’ curiosity was aroused so that they would read on their own with interest. For instance, learners listened to a passage read by the teacher from the story, “The Furnished Room” by O.Henry.

“The young tenant in the chair allowed these thoughts to file, soft shod, through his mind, while there drifted into the room furnished sounds and furnished scents. He heard in one room a tittering and incontinent, slack laughter; in others the monologue of a scold, the rattling of dice, a lullaby, and one crying dully; above him a banjo tinkled with spirit. Doors banged somewhere; the elevated trains roared intermittently; a cat yowled miserably upon a back fence. And he breathed the breath of the house – a dank savor rather than a smell- a cold, musty effluvium as from underground vaults mingled with the reeking exhalations of linoleum and mildewed and rotten woodwork. Then suddenly, as he rested there, the room was filled with the strong, sweet odor of mignonette. It came as upon a single buffer of wind with such sureness and fragrance and emphasis that it almost seemed a living visitant. And the man cried aloud; “What, dear?” as if he had been called, and sprang up and faced about....”

The learners were asked questions like,

1. “The young tenant in the chair allowed these thoughts to file, soft shod,...”. Can you guess the thoughts of the young tenant before he heard the furnished sounds and smelt furnished scents?
2. How many of them are in the room other than the young tenant? Give reasons for your choice.
3. Have you had any similar experience like the young man? Explain.
4. If you were in the position of the young man, how would you react to this situation?
5. Guess the ending of the story.

While eliciting responses of the learners, the researchers remained non-judgmental and encouraged all the learners to respond. When they were given the assurance of whatever they said would be correct, even shy learners tried to respond. When they were given time to think and respond, they felt comfortable and were willing to share their ideas.

They came out with responses like,

1. He might have thought about spirits, his girl friend or a horror movie which he had watched previous night.
2. a) Other than the young tenant, a girl must be living in the room because in each room he heard sounds.

TABLE 4: ACTIVITY

Main Goals	Writing a story
Learning Focus	Narrative writing
Technical Requirements & Software/websites used	Laptops/netbooks/tablets with internet access http://www.scholastic.com/teachers/story-starters/adventure-writing-prompts/
Preparation	Choosing the website
Procedure	Teachers motivate the learners to develop a story, using the website with story starters. After completion, the learners swap stories with their partners and give advice to each other about how to make the stories better.
Note. Adapted from Stanley, G. (2013)	

- b) No human being is in the room other than the young man, because there are number of clues in the passage, for instance, “it almost seemed a living visitant”.
3. a) I don’t believe in supernatural elements.
b) I too had a similar experience. When I was alone at home, I heard...
4. a) I would go out of the room immediately.
b) I would ignore such noise and start listening to music from my i-pod.
c) I would also make some noise.
d) I would try to find out where the noise had come from and try to record everything on my phone.
5. a) The young man lost his peace of mind and died at the end.
b) He started writing his experience and became a famous writer.
c) He had schizophrenia so he was cured of this disease by a popular doctor.
d) He started to make a study of spirits and he found that it was a haunted house.

The learners were eager to know whether their responses match with the story and they urged the teachers to provide them the complete story and read on their own quickly. They were overwhelmed when their guessing matched with the story.

VIII. RESULTS AND DISCUSSION

The study intended to find out if there is any impact of integration of technology on learners’ acquisition of L2. To facilitate this, hypothesis was constructed and the pretest and posttest were analyzed by using the statistical techniques namely, Paired samples statistics and Paired samples test. Graphical representation of the data was also made for a better understanding of the analysis.

H = There is no significant difference in the performance of the learners before and after integrating technology.

From the table 5, it is clear that the number of participant in each condition (N) was 58 and the mean and the standard deviation for the pretest and posttest were 28.2, 35.6, 6.55 and 6.18 respectively. It is apparent that

there was a considerable increase in the performance of the learners in the posttest. Since the paired sample statistics reveals that the mean of posttest was greater than the mean of pretest, it is clear that the learners were able to acquire L2 better when technology was integrated in their course compared to traditional approach (Nunan, 1999).

This is in line with studies such as Cress & Kimmerle (2007), Franklin & Van Harmelen (2007) and Bonderup Dohn (2009). It also reveals that the learners learnt best through a hands-on approach, actively exploring the digital world around them. The learners were engaged completely and their participation was ensured when they shared their knowledge in Web 2.0. From Table 6, it is clear that the correlation between pretest and posttest was .697. It was positively significantly correlated. It is evident that the performance of the learners in the posttest was different from their performance in the pretest. Before taking the posttest, the researchers found the learners to be highly motivated and involved when learning technologies were incorporated into their curriculum.

TABLE 5: PAIRED SAMPLES STATISTICS

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pretest	28.2241	58	6.55889	.86122
Posttest	35.6379	58	6.18912	.81267

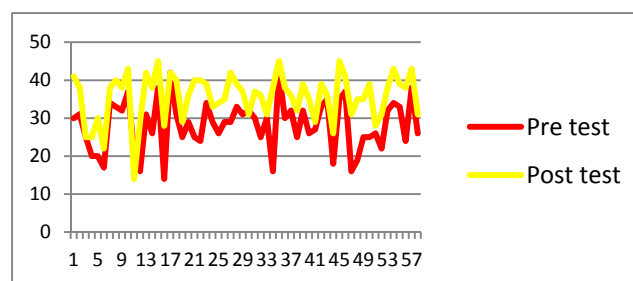
TABLE 6 :PAIRED SAMPLES CORRELATIONS

	N	Correlation	Sig.
Pair 1 Pretest and Posttest	58	.697	.000

TABLE 7: PAIRED SAMPLES TEST

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Pretest and Posttest	7.41379	4.97726	.65355	8.72250	6.10509	11.344	57	.000

Table 7, contains information about the paired samples t- test that was being analyzed. Sig (2-tailed) value shows that the two condition means were statistically different. This value was referred to as P value. The significant value in the final column of the table is .000 which is less than .05 so the researchers' null hypothesis was rejected and it is concluded that there is a statistically significant difference in the learners' performance between pretest and posttest. This piece of finding is consistent with the results obtained in Adair-Hauck et al., (1999) and Labbo, L. D., & Place, K. (2010). Though the learners were non-native speakers of English they could acquire the language with ease when they were exposed to blended learning.



COMPARISON OF LEARNERS' PERFORMANCE IN THE PRETEST AND POSTTEST

The graphical representation of the performance in pretest and posttest conducted among 58 learners of Engineering discipline shows that there was vast difference in their performance. The maximum mark for both Pretest and Posttest was 50 each. The time duration for the test was 90 minutes. Though the majority of the learners show some progress in their posttest, there were also few learners who had scored less mark in posttest

compared to the pretest. There might be two reasons for their poor performance. Firstly, the learners might not be familiar or comfortable with the learning technology used by the researchers and secondly, when they used their mobile phones, they might have got distracted and used for chatting, playing games etc.

IX. LIMITATIONS

The main defect of the study is in finding out the progress in SLA of the entire population from the sample chosen. The 58 subjects may not be the representatives of 660 learners who have enrolled for the course, 'Effective English'. It is similar to other survey researches where validity of the research is questionable (Nunan and Bailey, 2009). The results are, therefore, restricted to the sample in the study and may not be helpful to all the learners. The issue here is, when technology was integrated into the curriculum, some learners were unfocused and they used whatsapp and selfie for recreation purpose, and not for learning the language. The researchers had to constantly monitor and make them self-evaluate their work after each and every activity. Moreover, the activities discussed in the article cannot be followed blindly because new tools and innovations emerge every day and it is necessary for the language teacher to adapt to the challenges in teaching the teenagers.

X. CONCLUSION

The present study specifies that active-learning practices had a more noteworthy impact on learners' learning the language. They were most flourishing when they were taught how to learn as well as what to learn. Since the 21st century learners are critical thinkers, using computer and mobile technologies in the classroom have radically changed learners' acquisition of second language compared to traditional academic approaches which emphasizes rote memorization. The result shows that there was a considerable development in the process of learning the second language. The researchers had also observed that most of the learners show strong belief of social connectedness and expressed favorable views regarding their learning experiences in the language class where social networking sites were used as an additional tool.

REFERENCES

- [1] Adair-Hauck, B., Willingham-McLain, L., & Youngs, B. E. (1999). Evaluating the integration of technology and second language learning. *CALICO journal*, 17(2), 269-307.
- [2] Al-Jarf, R. S. (2004). The Effects of Web-Based Learning on Struggling EFL College Writers. *Foreign Language Annals*, 37(1), 49-57.
- [3] Beatty, K. (2010). *Teaching and Researching Computer-Assisted Language Learning* (2nd edition). London: Pearson.
- [4] Becker, H. J., & Riel, M. M. (1999). Teacher professionalism and the emergence of constructivist-compatible pedagogies. Retrieved September, 9, 2010.
- [5] Beetham, H., & Sharpe, R. (Eds.). (2013). *Rethinking pedagogy for a digital age: Designing for 21st century learning*. Routledge.
- [6] Benson, P. (2013). *Teaching and researching: Autonomy in language learning*. Routledge.
- [7] Bonderup Dohn, N. (2009). Web 2.0: Inherent tensions and evident challenges for education. *International Journal of Computer-Supported Collaborative Learning*, 4(3), 343-363.
- [8] Chapelle, C. A. & Jamieson, J. (2008). *Tips for Teaching with CALL* (includes CDROM). White Plains, NY: Pearson Education.
- [9] Chinnery, G. M. (2006). Emerging technologies. Going to the mall: mobile assisted language learning. *Language learning & technology*, 10(1), 9-16.
- [10] Cress, U., & Kimmerle, J. (2007). A systemic and cognitive view on collaborative knowledge building with wikis. *International Journal of Computer-Supported Collaborative Learning*, 3(2), 105-122.
- [11] Dickinson, L. (1987). *Self-Instruction in Language Learning*. Cambridge: Cambridge University Press.
- [12] Drexler, W. (2010). The networked student model for construction of personal learning environments: Balancing teacher control and student autonomy. *Australasian Journal of Educational Technology*, 26(3).
- [13] Drexler, W. (2010). The networked student model for construction of personal learning environments: Balancing teacher control and student autonomy. *Australasian Journal of Educational Technology*, 26(3).
- [14] Driscoll, M. P. (2002). *How People Learn (and What Technology Might Have To Do with It)*. ERIC Digest.
- [15] Duggan, M., & Smith, A. (2013). *Cell internet use 2013*. Washington, DC: Pew Research Center.
- [16] Egbert, J. & Hanson-Smith, E. (Eds.) (2007). *CALL Environments, Research, Practice and Critical Issues* (Second Edition). Alexandria, VA: TESOL.
- [17] Egbert, J. & Petrie, G. M. (Eds.). (2005). *CALL research perspectives*. Mahwah, N.J. : L. Erlbaum Associates.
- [18] Egbert, J. (2005). *CALL Essentials: Principles and Practice in CALL Classrooms*. Alexandria, VA: TESOL.
- [19] Fotos, S. & Browne, C. (Eds.). (2004). *New perspectives on CALL for second language classrooms*. Mahwah, N.J.: L. Erlbaum Associates.
- [20] Franklin, T., & Van Harmelen, M. (2007). *Web 2.0 for content for Learning and Teaching in Higher Education*. Bristol: JISC (Retrieved from). http://www.jisc.ac.uk/media/documents/programmes/digital_repositories/web2-content-learning-and-teaching.pdf
- [21] Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: a review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70-105.
- [22] Gupta, S., & Seth, A. (2014). Usage of Social Networking Tools in Higher Education with Special Reference to Colleges of Jammu Division, Jammu and Kashmir, India. *Trends in Information Management (TRIM)*, 10(1).
- [23] Hertel, T. J. (2003). Using an E-Mail Exchange to Promote Cultural Learning. *Foreign Language Annals*, 36(3), 386-396.
- [24] Hew, K. F., & Brush, T. (2007). Integrating technology into K-12 teaching and learning: Current knowledge gaps and recommendations for future research. *Educational Technology Research and Development*, 55(3), 223-252.
- [25] Hubbard, P. & Levy, M. (Eds.). (2006). *Teacher education in CALL*. Amsterdam; Philadelphia, PA : John Benjamins Publishing Company.
- [26] Kern, R., Ware, P., & Warschauer, M. (2008). Network-based language teaching. In Deussen-Scholl, N. V. & N. H. Hornberger (Eds.), *Encyclopedia of language and education*, 2nd Edition, Vol. 4: Second and foreign language education (pp. 281- 292). New York: Springer.

- [27] Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(03), 271-289.
- [28] Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(03), 271-289.
- [29] Labbo, L. D., & Place, K. (2010). Fresh perspectives on new literacies and technology integration. *Voices from the Middle*, 17(3), 9-18.
- [30] Lafford, P. A., & Lafford, B. A. (1997). Learning language and culture with Internet technologies. *Technology-enhanced language learning*, 215-262.
- [31] Lattimer, H., & Riordan, R. (2011). Project-based learning engages learners in meaningful work. *Middle School Journal*, 43(2), 18.
- [32] Levy, M. & Stockwell, G. (2006). *CALL Dimensions: Options and Issues in Computer Assisted Language Learning*. Mahwah, NJ: Lawrence Erlbaum.
- [33] Lewis, G. (2007). *Teenagers*. Oxford University Press.
- [34] McCain, C. L. (2008). The right mix to support electronic medical record training: classroom computer-based training and blended learning. *Journal for Nurses in Professional Development*, 24(4), 151-154.
- [35] Mitchell, S., Foulger, T. S., Wetzell, K., & Rathkey, C. (2009). The negotiated project approach: Project-based learning without leaving the standards behind. *Early Childhood Education Journal*, 36(4), 339-346.
- [36] Moeller, A. J. (1997). *CALICO '97 KEYNOTE ADDRESS*.
- [37] Moran, M., Seaman, J., & Tinti-Kane, H. (2011). *Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media*. Babson Survey Research Group.
- [38] Motteram, G. (Ed.). (2013). *Innovations in learning technologies for English language teaching*. London: British Council.
- [39] Nixon, J. (2004). Education for the good society: The integrity of academic practice. *London Review of Education*, 2(3), 245-252.
- [40] Nunan, D. (1999). *Second Language Teaching & Learning*. Heinle & Heinle Publishers, 7625 Empire Dr., Florence, KY 41042-2978.
- [41] Park, H. R., & Kim, D. (2011). Reading-strategy use by English as a second language learners in online reading tasks. *Computers & Education*, 57(3), 2156-2166.
- [42] Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the horizon*, 9(5), 1-6.
- [43] Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. *Educational technology research and development*, 56(4), 487-506.
- [44] Sandholtz, J. H. (1997). *Teaching with technology: Creating student-centered classrooms*. Teachers College Press, Teachers College, Columbia University, 1234 Amsterdam Ave., New York, NY 10027.
- [45] Staff, E. (2008). Why integrate technology into the curriculum?: The reasons are many. Retrieved December, 20, 2011.
- [46] Stanley, G. (2013). *Language learning with technology: Ideas for integrating technology in the classroom*. Cambridge University Press.
- [47] Sunny, S., Divya, M., Madhavan, R., Likitha, S., & Saravanakumar, K. *RECOMMENDATION OF BLOGS IN E-LEARNING# 1*.
- [48] Tompkins, Gail E. (1982). "Seven Reasons Why Children Should Write Stories." *Language Arts*, 59(7), 718-21. [EJ 269 736]
- [49] Wang, L. (2005). The advantages of using technology in second language education: Technology integration in foreign language teaching demonstrates the shift from a behavioral to a constructivist learning approach. *THE Journal (Technological Horizons in Education)*, 32(10), 38.
- [50] Wildner, S. (1999). Technology integration into preservice foreign language teacher education programs. *Calico Journal*, 17(2), 223-250.
- [51] Wong, L.L.C. (2013). Technological innovation and teacher change: IT in teacher professional development. In Hyland, K. & Wong, L.L.C. (Eds.) *Innovation and change in English language education*. Oxford and New York: Routledge.
- [52] Yang, S. C., & Huang, Y. F. (2008). A study of high school English teachers' behavior, concerns and beliefs in integrating information technology into English instruction. *Computers in Human Behavior*, 24(3), 1085-1103.