Research Article

Unlocking Language Education with Emerging Technologies: An Overview of Attitudes and Effectiveness

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ABSTRACT

Present study sets out to investigate the attitude/opinion of university students regarding application of emerging technologies (iPad) in the context of ESL (English as second language) classrooms in Pakistan. The study was delimited to students of Punjab University (PU, a public sector university) and Beaconhouse National University (BNU, a private sector university), both top rated universities of Lahore and where English language teaching is given preference. The data was collected from 45 students of PU and 35 students of BNU via random sampling techniques. Collected data was organized and prepared for computer analysis with Statistical Package for Social Science (SPSS) version (16.0). Mean and Standard Deviation (SD) were calculated in order to describe opinions while t- test and ANOVA were applied to identify difference in opinion of respondents. Findings illustrated the significance of iPad employment in the face of improving level of learners' motivation and concentration and rendering them more autonomy, ingenuity, exposure and versatility.

Key Words: ESL, second language learning, emerging technology, learner attitude, iPads

1. INTRODUCTION

Use of the latest technologies in the field of language education has amplified many folds after the overture of distance learning/teaching technique. It is foreseeable that world is heading towards new disciplines like the use of new emerging technologies in the field of linguistics as this technique is significantly enhancing the interest of students. The researchers have also started to realize that learning through these technologies can be proved incredibly prolific. It is assumed that learning English through new technologies can be productive in Pakistan where it can enhance the interest of students in ample social and academic setting. The objective of undertaking an overview about language learning through new technologies in Pakistan is to measure positive/ negative impact of new technologies on language learning process and to determine the attitude of learners towards given phenomenon.

The history illustrates that human beings' quest for learning has always been a dynamic process and in order to accomplish it he/she had always tried to invent/explore new applications and techniques. Once it was proposed that the interaction between teacher and learners was indispensable for gaining knowledge. The same technique was also applied and emphasized by

the institutes/educators for learning a language particularly in the case of a second language, foreign language or the native language but it did not bear highly rewarding results. All the proposed methods like GTM, Audiolingual, CLT, Postmethod technique and even Prabhu's mental plausibility are the examples of this multifarious and intricate phenomenon. The literature regarding these methods (particularly in the cases of SL/FL learning) showed that students and teachers always lived in a complex state of affairs and were unable to apply any one of above mentioned methods appropriately because of certain invisible factors like different educational background of learners and teachers.

Contrary to this, a novel philosophy of gaining knowledge emerged in the form of distance learning. Distance learning brought about a revolution in the field of education. In order to fulfill the needs through distance learning Man started to approach new technologies. The use of multimedia, for learning purposes and to enhance interest in learning, is an example in this regard.

Later on, the advancement in the field of emerging technologies (mobile technology) changed the whole scenario and it is proving very productive. Now, access towards everything lies in our hands and we can browse/ find anything with no trouble because of new inventions. These new inventions also invite us to learn via these technologies.

This is the reason that human beings learning through new emerging technologies are benefiting from these technologies in all the fields of life in current era of science and technology. These emerging technologies are also playing an important role in the field of linguistics especially L2 learning as well. As Marmarelli & Ringle, (2011), & Morton & Jack, (2010 as cited in Gorichanaz 2011: p.14) are of the view that Students show immense interest and demonstrate their enthusiastic approach while learning through mobile technology. It has even become more convoluted after the emergence of touch screen tablets. Gorichanaz (2011: p.1) is also of the view that "apple touts the device as a breakthrough in education". Now, after the failure (having problems with) of all the other proposed methods of language learning; it is proposed that we can enhance the interest of learners in learning SL/FL via application of new emerging technologies.

The emergence of iPad, iPhone, Android tablets and Robotics etc has got great magnitude in the field of language learning. Now, it is assumed that a language can be learnt in an enhanced way by employing these scientific tools despite of using old traditional methods of language learning/teaching. It is also assumed that students feel boredom, hesitation, inferiority complex; the factors that cause anxiety while learning a language through traditional methods. On the other hand, at the same time, supremacy of language learning like ESL/EFL or native language through new emerging technologies is also being criticized by many researchers. As Choi et al., (2007), & Gupta, (2010 as cited in Gorichanaz 2011) are of the view that teachers also seem interested but a number of logistical factors seem to be limiting widespread adoption like institutes policies, professional support, training and cost of devices etc. They also indicate that direct interaction between a teacher and learners is necessary for learning a language. In Pakistan, we have also the same positive and negative attitude towards learning a language through emerging technologies. This complex relation between human beings and new

technologies invites us to take an overview of the described problem to know about the positive or negative effects of new emerging technologies on learning an L2 in Pakistan.

1.1 Research Hypotheses

$H^0$1. There is no statistical significant difference between the views of all students of English departments of PU and BNU about the use of iPad technology for learning English as a second language.

$H^0$2. There is no gender-wise statistical significant difference between the opinions of all the male and female students of English department of Punjab University (PU) and Beacon House National University (BNU) about the use of iPad technology for learning English.

$H^0$3. There is no locality-wise statistical significant difference between the views of all male and female students of English departments of PU and BNU, regarding the use of iPad technology for learning English as a second language.

$H^0$4. At semester level, there is no statistical significant difference between the views of all male and female students of English departments of PU and BNU about the use of iPad technology for learning English as a second language.

2. LITERATURE REVIEW

Whether the traditional methods of teaching will remain in questions or those will be revolutionized via technological innovation, is an intricate query till date. To reform the education sector and to make learning comparatively unproblematic; the developed countries are adopting emerging technologies rapidly. It is suspected that in developing countries, one of the major reasons behind the less development in the education sector and learners' learning methodologies is their deficiency in new emerging technologies. This is reason that the students of developed countries have to rush towards comparatively developed countries. The current scenario confirms that the future of education lies in the technological innovation and it will have great significance in future for teaching and learning process. The worth mentioning point, here, is that the use of emerging technologies, after the emergence of distance learning /teaching technique, has revolutionized the world at huge level. Overall, people are considering it as a good change in comparison to old teaching methods and are showing their interest in it.

Impact of emerging technologies on ESL (English as a second language) classes is one of the current pervasive issues in English learning context. Many researchers are making different sort of studies in order to observe impact of the mentioned technologies on learning especially L2 (second language) learning.

A study conducted by Harmon (2011) on the students of The Euclid City School (ECS) showed that they got productive results while learning with the help of iPads. The students showed their great interest while learning through iPads and focused on meaningful work

because of having feeling of self motivation and self-directed studies as compared to those controlled students who do not have iPads. Similarly, a detailed study done by Connell et al (2011) on how APPLE technologies can be beneficial in learning for students having sensory and learning disabilities also showed that advanced and universal features and applications of APPLE technology especially designed for learning purposes are helping disabled learners, both sensory and learning disables, in classes as well as at homes. Harmon (2011) experimental research also showed that teachers are also found motivated to make emerging technologies as an essential part of ESL classes. Another study by Nusrat, Khan & Narcy- Combes (2013) focused on role of computer mediated ESL learning in the context of Pakistan and showed that email writing activities corresponded to enhancement of syntactical complexity, lexical complexity in the writing samples of ESL learners while in-class writing activities enhanced their grammatical accuracy. Chinnery (2006) surveyed that learners use mobiles for vocabulary learning, quizzes, online learning and learning through emails, file sharing, etc. but they also face technical issue e.g., small, low resolution screens, poor audio quality, limited memory of these devices, internet connectivity problems etc.

2.1 Issues with Emerging Technologies

There exist certain tribulations like reluctant school policies, lack of professional support, training and of course high prices of these devices (Gorichanaz, 2001). Due to such concerns learners have to encounter various technical problems. They are of the view that the use of new technology is a complicated process and still new inventions with appropriate technological software are required in this field. This is the reason that the opponents of the use of new technologies in classroom argued that these technologies cannot replace a teacher in the classroom and it is complicated to achieve good outcomes only via use of new technological world, without having interaction between instructor and learners. They also believe that teachers are not competent in using new technologies but till now in developing countries (for example, teachers in case of Pakistan, even do not like to use multimedia in class rooms). therefore, many teachers and researchers are working on different techniques and methodologies that how to apply diverse technologies in the classrooms to get enhanced results. Previous studies also showed the students' attitude towards learning particularly in an SL/FL classroom via new technologies. They want to break the routine for enhancing interest in learning. According to Barrs (2012) emerging technologies can help long way in students' participation in classes and in posting and replies. Moreover, students remain more engaged in language learning classes because they overcome the gap existing between outer and inner environment of the class room.

3. RESEARCH METHODOLOGY

The study was planned to take the opinions of students of linguistics departments of Punjab University (PU), and Beacon House National University (BNU), Lahore.

3.1 Design of the Study

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Current study was carried through survey research because "survey studies aim at describing the characteristics of a population by examining a sample of that group" (Dornyei, 2011: P.101). It tends to be quantitative in nature because Quantitative research involves data collection procedures that result primarily in numerical data which is then analyzed primarily by statistical methods.

3.2 Rationale of Choosing Survey Research

The survey research was chosen by the researchers because there lay controversies among the researchers over the use of emerging technology and survey studies normally provide us with opportunities to collect data from large number of respondents regarding their beliefs, attitudes and behaviors in terms of query under discussion. A number of researcher argued that proper learning is impossible in case of improper interaction between teacher and learners. That is why it is considered a vastly controversial issue particularly in case of developing countries where people enclose very limited resources.

3.3 Sampling Procedure

Keeping above mentioned issues in mind, a survey research was chosen by the researchers to investigate into the issue because "evidence-based practice has become a powerful movement" (Bradford and Cullen 2012: p. 113). The respondents of the study were chosen through proportional and random sampling technique. Restricted questionnaire technique was employed in survey by the researchers because in most of the cases according to Cullen (2012) after formulating the hypothesis numerical data on each variable can be analyzed for finding the results. All the 65 enrolled students of Punjab University (PU), Lahore and 48 of Beacon House National University (BNU) linguistics departments were taken as target population.

Proportional Sampling Size

University	Total	Frequency	%age	Ratio
PU	60	45	75	3:4
BNU	48	35	75	3:4

Sample from Population of PU & BNU

Total 90 Male and Female Students
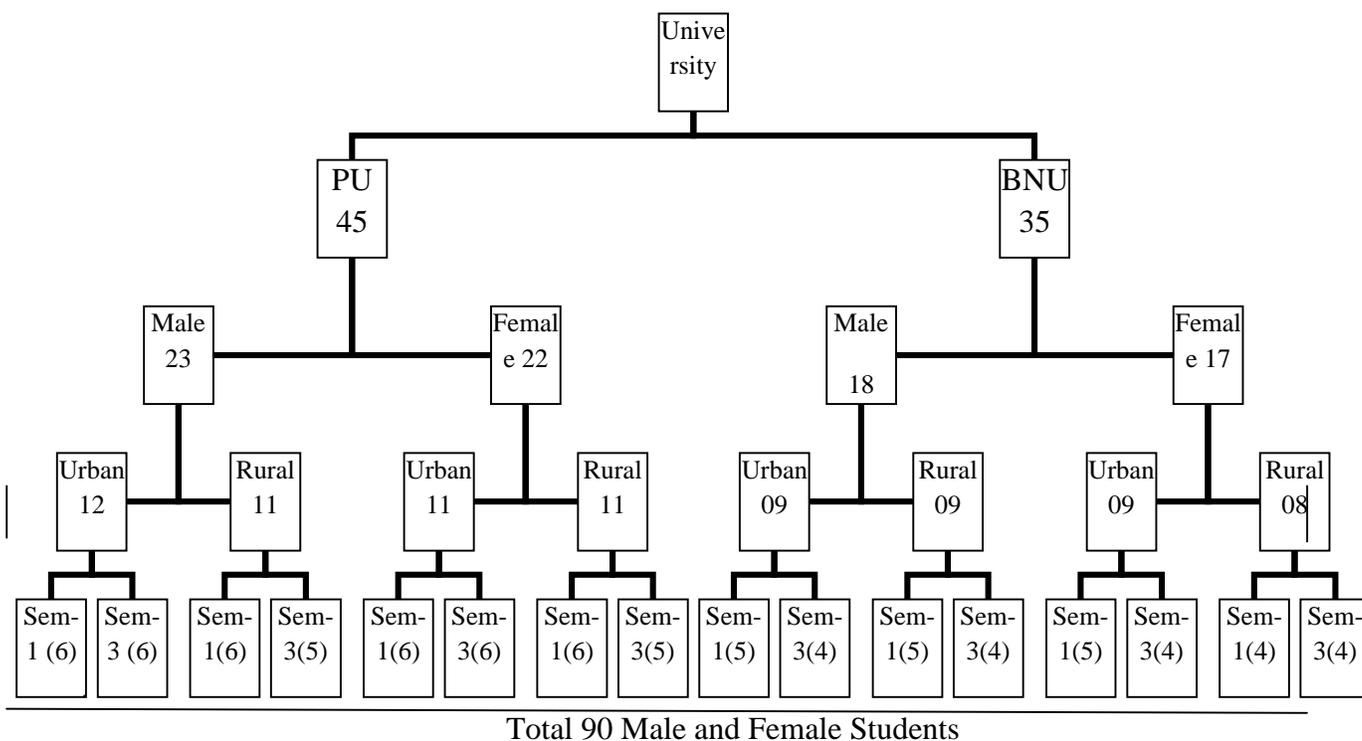
First of all the subjects of the study were chosen through proportional sampling size almost 75% from PU and 75% from BNU. That higher percentage via PPSS was chosen because the available subjects for the study were very short. After that random sampling technique was applied for further sampling. For detail see the sample of PU & BNU students.

To enhance validity level, students were also selected from Urban and rural areas and also across gender: male and female. The linguistics' departments of PU and BNU were chosen because both departments are working tremendously for the promotion of higher education and language teaching/learning.

Semester I and Semester III were selected from both of the universities because they took admission only once a year. Only the students of semester I and III were available for present study.

3.3 Instrument of the Study

In order to investigate the given query, a questionnaire comprising 12 items was developed on five points rating scale **(Likert Scale).** The number description were as follows; 5 for strongly agree, 4 for agree, 3 for undecided, 2 for disagree and 1 for strongly disagree.

3.4 Pilot Study

The instrument for the study purpose was arranged from literature review. For sorting out the validity of the questionnaire, a pilot study was conducted in order to ensure that the questionnaire language is simple and understandable. The researchers distributed the questionnaire among M.Phil students and three senior lecturers of the Lahore Leads University. They were asked to complete the questionnaire within 10 minutes. However, students, and three other lecturers of Lahore Leads University were not included in the part of sample of population. Afterwards, for item analysis Cronbach Alpha reliability coefficient was computed to check the internal consistency based on inter item correlation. Pilot test of the data revealed the reliability coefficient .732   from students. So computed reliability of questionnaire was higher than the Frankle and Wallen's thumb rule 0.70.

3.5 Administration of Instrument

The researchers went to the classrooms of students of linguistics departments of both of the universities. First of all, researchers explained before them the nature of research and if the respondents found any problem, the possible guidance was also provided to them by the researchers. The respondents were asked to tick the options in good faith and it was insured that there should be no biasness in data collection.

3.6 Analysis of the Data

After assembling data, it was ordered and prepared for computer analysis with Statistical Package for Social Science (SPSS) version (16.0). SPSS' frequency, percentage, t-test and ANOVA tests were applied for the analysis of data.

4. FINDINGS AND DISCUSSION

Frequency Table: Table no. 1

The table showed the opinions of all the students of PU & BNU about the use of iPad for learning English.

Sr#	Statements	SA	A	Un.D	DA	SDA	Mean	Std.
1	You feel that old methods of English teaching have lost the value for students.	22.5%	43.8%	5%	27%	1.2%	3.59	1.155

2	You feel that students feel anxiety while learning English through traditional methods of teaching.	40%	36.2%	11.2%	8.8	3.8%	4.00	1.102
3	You think that it is difficult for a teacher to teach through new technologies.	25%	48.8%	13.8%	7.5	5.0%	3.81	1.057
4	You think that the use of new emerging technologies for learning English is the wastage of time.	8.8%	42.5%	13.8%	16.2	18.8%	3.06	1.306
5	You feel that students like to learn interestingly through the use of mobile tablets.	12.5%	62.5%	17.5%	5.0	2.5%	3.78	.826
6	In your experience, we are unable to promote education because of not using the new technologies.	28.8%	51.2%	17.5%	00%	2.55%	4.04	.834
7	You feel that, we are far behind from developed countries in promoting education because of not using the new technologies.	12.5%	46.2%	38.8%	2.5%	00%	3.69	.722
8	You think that governments should provide support to teach through new technologies.	31.2%	46.2%	17.5%	5%	00%	4.04	.834
9	You think that teachers can give feedback easily through the use of iPad in the classroom.	41.2%	43.8%	12.5%	1.2%	1.2%	4.22	.811
10	You feel that teaching via new emerging technologies is proving very fruitful for disable	23.8%	56.2%	15%	00%	5%	3.94	.919

	learners.							
11	It is proving an independent source of learning without any hesitation.	32.2%	38.8%	21.5%	2.5%	5%	3.91	1.046
12	The use of emerging technologies has very significant impacts on language learning.	32.5%	47.5%	15.5%	5%	00%	4.08	.823

Tables of Differences

The tables show the difference in opinion to accept or reject the above mentioned hypothesis (via t-test & Anova)

Table. 2.1 (t-test)

Universities	N	M	SD	Std. Error mean	T	df	Sig. (2-tailed)
PU	45	46.36	5.924	.883			
					.355	78	.724
BNU	35	45.89	5.820	.984			

Table no. 2.1 shows the universities wise differences in opinion of all the students of PU & BNU about the use of iPad for learning English. The computed t value is .355 and sig value is 0.72 which is greater than the P value (0.05). Therefore, the null is being hypothesis.

Table no. 2.2 (ANOVA tests)

Those tests were calculated separately but arranged in one table for the purpose of convenience. Calculations given in one table as (a) are meant, for gender opinions, (b) for locality wise opinions and (c) for semesters' wise opinions.

The computed F Value (gender wise) is 0.480, computed significant values is 0.697 which is greater than P- value (0.05). The computed (F = 0.480, p = 0.697). Therefore, we accepted the null hypothesis.

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Table. 2.2 (ANOVA tests)

		Sum of Square	Df	Mean Square	F	Sig.
a) Gender's opinions	**Between Groups**	**50.223**	**3**	**16.741**	**.480**	**.697**
	Within Groups	**2649.977**	**76**	**34.868**		
	Total	**2700.200**	**79**			
b) Locality wise Opinions	**Between Groups**	**149.546**	**7**	**21.364**	**.603**	**.751**
	Within Groups	**2550.654**	**72**	**35.426**		
	Total	**2700.200**	**79**			
c) All Semesters' wise Opinions	**Between Groups**	**371.667**	**15**	**24.778**	**.681**	**.793**
	Within Groups	**2328.533**	**64**	**36.383**		
	Total	**2700.200**	**79**			

The computed F Value (locality wise) is 0.603, computed significant values is 0.751 which is greater than P- value (0.05). The computed (F = 0.603, p = 0.751). Therefore, we accepted the null hypothesis.

The computed F Value (semesters wise) is 0.681, computed significant values is 0.793 which is greater than P- value (0.05). The computed (F = 0.681, p = 0.793). Therefore, we accepted the null hypothesis.

4.1 Opinions of all the students of PU & BNU about the use of iPad for learning English

▪ Most of the students, 66.3%, agreed that the old methods of English teaching have lost the value and the use of new emerging technology can be prolific for English (L2) learning purpose. However, 29% disagreed and 5% could not make any decision and their opinion cannot be devalued in the context of using the old teaching methods.

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- Most of the students, 76.2%, agreed that students feel anxiety while learning through traditional methods of teaching.
- Most of students, 66.8%, agreed that it is not difficult for a teacher to teach through new emerging technologies.
- Only 51.2% agreed that a teacher can save the time by using new technology in the classrooms while 35% disagreed and 13.8% could not make any decision. This close difference between agreements and disagreements showed that the use of new emerging technologies can be proved wastage of time in case of mismanagement in the classroom or can result in irrelevant activities.
- Most of the students 75% agreed that students like to learn via new emerging technologies.
- Majority of the students 80% agreed the government body etc. is unable to promote education in Pakistan because of not using the new technologies in classrooms.
- Mostly students 58.7% agreed that the Pakistanis are lacking in different fields and are far behind from developed countries in promoting education because of not using the new technologies.
- Most of the students 77.5% agreed that governments should provide support to teach through new technologies.
- Majority of students 85% agreed that teachers can provide feedback easily through the use of iPad in the classroom.
- Majority of the students 80% agreed that teaching via new emerging technologies is proving very fruitful for disable learners.
- Mostly students 61% agreed the use of new emerging technologies is proving an independent source of learning without any hesitation.
- Majority of the students 80% agreed that the use of emerging technologies can be proved very fruitful for language learning.

4.2 Discussion

The obtained results demonstrate and support the objective of the study that was to identify the attitudes of L2 learners regarding use of iPad technology for learning English as a second language in Pakistan. Findings from PU & BNU students completely supported the objective. It showed that the use of emerging technologies can be proved very prolific and dynamic for learning English. They are also of the opinion that there is dire need to bring about improvement in existing methods for English teaching/ learning via use of new emerging technologies in the classroom. The teachers can enhance the interest and confidence level of the learners via iPad usage. According to the students, the use of iPad can prove an independent source of learning. The study also showed that students feel vacillation when they go in foreign countries for their higher education because there they have to work in totally new environment. They find a new technological world in every field of life there. So, the findings demonstrate that there is need to do much work regarding application technology and updated L2 techniques in Pakistani classrooms. Earlier studies on the use of new technology in the language classrooms have also shown same results. Gones (2011: P.1) & Gorichanaz (2011) concluded that emerging

technology is playing an important role in improving learners despite of their vital issues. In his experimental study in Euclid City Schools, Ohio, Harmon (2011) concluded that the difference between students' score 219.22 (students who were provided iPasd) and 214.81 (without iPad) in a reading activity showed that the importance of iPad in language learning. So, after the whole discussion on the use of iPad for learning English it is argued that a balanced curriculum (having all aspects and uses of new emerging technology) should be developed by the agencies which should be able to fulfill the needs of the students.

5. CONCLUSION & RECOMMENDATIONS

The English language curriculum (ESL) should be developed by such agencies/educators having abilities to incorporate the applications of new emerging technology and for given purpose curriculum of developed countries can be consulted and followed. The government and language planners should support designing an appropriate curriculum for ESL learners and the use of new emerging technologies in classrooms should be particularly emphasized. This survey research on the use of iPad in language learning classroom has provided valuable findings from both aspects; statistically and descriptively. However, it needs more inquiry and it is recommended that discussed research query should be explored from a variety of perspectives; particularly via experimental research design at school or university in Pakistan to find the true nature of emerging technology and its promising nature given social and cultural mosaic.

REFERENCES

Alvarez, C., Brown, C., & Nussbaum, M. (2010). Comparative study of Netbooks and Tablet PCs for fostering face-to-face collaborative learning. *Computers in Human Behavior.*

Bonds–Raacke, J., Raacke, J. (2008). Using Tablet PCs in the classroom: An investigation of students' expectations and reactions. *Journal of Instructional Psychology.*

Bradford, S., Cullen, C., & Green, L. (2012). Working as a Practitioner Worker in Bradford, S., and Cullen, F., (eds) *Research and Research Methods for Youth Practitioners,* London: Routledge

Connell, T., Freed, G., & Rothberg, M. (2010). *Using Apple Technology to Support Learning for Students with Sensory and Learning Disabilities*. WGBH Educational Foundation. Retrieved on October 3, 2013, from http://www.apple.com/education/apps.

Dornyei, Z. (2011). *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies.* Oxford University Press.

Fadel, C., Lemke, C. (2009). *Technology in schools: what the research says*. Retrieved from h t t p : / / w w w . m e t i r i . c o m / P D F s / October 3, 2013.

Fraenkle and Wallen. (1993). *How to design and evaluate research in education (2*[nd] *edition).* McGraw-Hill :New York.

Hulme, A. K., Shield, L. (2006). *Researching new and emerging technologies In language education*. Unpublished presentation to internal Open University, UK INTELLECT research group.

Hulme, A. K., Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction*. European Association for Computer Assisted Language Learning*. Retrieved on December 13, 2013 from http://dl.acm.org/citation.cfm?id=1520087

Harmon, J. (2011). *Unlocking Literacy with iPad.* Euclid City Schools, Ohio. Retrieved on September 29, 2013, from http://www.apple.com/education/apps

Jones, R. J. (2012). *Emerging Technologies Digital Video Revisited: Storytelling, Conferencing, Remixing.* Virginia Commonwealth University http://llt.msu.edu/vol16num1/emerging.pdf February 2012, Volume 16, Number 1. Retrieved from http://llt.msu.edu/vol16num1/emerging.pdf October 1,2013.

Jones, R. G. (2011). *Emerging technologies Mobile apps for language learning.* Language Learning & Technology. Retrieved from http://llt.msu.edu/issues/june2011/emerging.pdf June 2011, October 1, 2013.

Nusrat, A., Khan, T., Narcy- Combes, M. F. (2013). Traditional and computer mediated l2 learning among ESL learners: A comparative study of e-mail and paper writing. *Elixir International Journal,* 64 (2013), 19429-19435. Retrieved on December 13, 2013 from www.elixirpublishers.com.

Timothy Gorichanaz, T., Zafra, D. C. (2011). *Mobile Learning: Attitudes and Effectiveness.* University of Wisconsin–Milwaukee. Retrieved from http://www.llt.msu.edu on September 28, 2013.

Thornton, P., Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*.