Using Multimedia to Motivate Students in EFL Classrooms: A Case Study of English Master's Students at Jijel University, Algeria

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Abstract

With the development of technology and the boom of digital revolution, foreign-language teachers should think about effective new ways to create better foreign-language teaching or learning milieus that are supported by multimedia technologies. It is widely agreed that language instruction that integrates technology has had a tremendous impact on the language learning process. Moreover, learners are expected to be more motivated in a web-based computer-assisted language learning (CALL) programme and to improve their competencies. As a result, CALL has become increasingly popular in English as a Foreign Language (EFL) teaching. This study focuses on how multimedia can play an important role in motivating EFL students. For this purpose, a questionnaire was administered to a group of Master's degree students at Med Seddik Benyahia University, Algeria, in June 2012. It was found that the availability of multimedia was a dynamic and challenging motivating factor in EFL classrooms, leading to certain suggestions focusing on the achievement of learning objectives.

Keywords: multimedia, motivation, EFL activities, learning, teaching.

Introduction

Multimedia provides a complex multi-sensory experience, presenting information through text, graphics, images, audio, and video. It has been proven that a mixture of words and pictures always integrates a large amount of information (Mayer, 2001: 55). Among the advantages of multimedia are having the ability to choose among media to present well-structured information (Larkin and Simon, 1987: 65), using several representations to improve memory (Penny, 1989: 398), encouraging active processing (Ainsworth, 1999: 145), and presenting more information at once (Sweller, 2005: 38).

Students learn best by seeing the value and importance of the information presented in the classroom. Thus, for students to achieve their ultimate goal in learning, it is important to use a variety of teaching methods and to make the classroom environment stimulating and interactive.

According to (Nunan, 1999: 65), a percentage of language educators depend on the transmission model, which emphasises the teachers' responsibility to convey knowledge and correct errors, whereas students simply receive and store the information taught in class. Many students tire of this teacher-centred model of English-language learning and complain that the class is very boring and monotonous and that they want a new and different approach. One attempt to solve this problem may be to develop an active teaching approach to stimulate students' interest in English-language learning. With the advent of new technology, multimedia is increasingly accepted as a means of Teaching English as a Foreign Language (TEFL).

Many English teachers state that teaching English with multimedia makes an English class more active than in the teacher-centred model (Yang and Fang, 2008: 137). In contrast to traditional English classrooms, in multimedia classrooms, the teacher can use a button and keyboard to show significant content in several seconds, as long as he or she is familiar with the operation of the multimedia.

Given the importance of using multimedia in language teaching, computers have become very popular in schools, and many teachers are now using these devices for language learning. Teachers are always the facilitator of an entire class, in which they apply teaching methodologies accumulated over many years of teaching experience while adding the use of multimedia in EFL teaching. Currently, the importance of information technology in the educational sector is well known. Information technology helps students as well as teachers in studying course material easily because of rapid access (Solanki, 2012: 151).

The application of multimedia technology in English teaching has the following beneficial purposes:

- 1. To cultivate students' interest in study
- 2. To promote students' communication capacity
- 3. To widen students' knowledge and to provide an insightful understanding of Western culture
- 4. To improve the effect of teaching
- 5. To improve interaction between teachers and students
- 6. To create context for language teaching and to provide flexibility in course context

Skilful teachers know how to convey information in an appropriate way and how to arouse students' interest using computers or the Internet. Therefore, a proper combination of multimedia and teaching methodology is appropriate to attract EFL students' attention during English-language learning (Acha, 2009: 29).

This study aimed to identify the role of technology in motivation in language classrooms and to review students' ideas on how to use technological equipment effectively. Consequently, the study aimed to propose several practical ideas to make language learning more effective.

The use of multimedia is rapidly emerging as a basic skill that will be as important to life in the 21st century in the future as reading is now. In fact, multimedia is changing the nature of reading itself. Instead of limiting an individual to the linear presentation of text as printed in books, multimedia makes reading dynamic by giving words an important new dimension (Rubin, 1987: 103).

Multimedia enables learners to experience their subject in a vicarious manner. The key to providing this experience is having simultaneous, rather than sequential, graphics, video, and audio. The appeal of multimedia learning is best illustrated by the popularity of the video games currently available on the market (Johnstone and Milne, 1995: 230).

Multimedia programmes can combine text, audio, video, and animated graphics in an easy-to-use fashion. Moreover, under conditions of chronic under-funding, multimedia can provide an enhanced or augmented learning experience at a low cost per unit. It is here that the power of multimedia can be unleashed to provide a long-term benefit to all (Mayer et al., 1998: 28).

Multimedia enables learning through exploration, discovery, and experience. Technology does not necessarily drive education. That role belongs to the learning needs of students. With multimedia, the process of learning can become more goal oriented, more participatory, flexible in time and space, unaffected by distances, and tailored to individual learning styles and can increase collaboration between teachers and students. Multimedia enables learning to become fun and friendly, without fear of inadequacies or failure (Lu, Wan and Liu, 1999: 42)

Fuelling this growth are advances in technology and price wars that have dramatically lowered the cost of multimedia computers. The growing number of Internet users has created a larger market for multimedia, and the new tools are enabling educators to become developers. Multimedia is used to enable individuals to create course material that once required teams of specialists, and individuals can now produce multimedia desktop video productions.

The educational benefits of multimedia can be observed from different perspectives. From an educators perspective, multimedia tools will

- 1. Provide students with opportunities to represent and express their prior knowledge.
- 2. Allow students to become designers in their learning process, using tools to access and interpret information, organise their personal knowledge, and represent what they know to others.
- 3. Engage students and provide valuable learning opportunities via applications.

- 4. Empower students to create and design rather than "absorbing representations created by others."
- 5. Encourage deep reflective thinking.
- 6. Create personally meaningful learning opportunities.

From a student perspective, multimedia will provide several educational advantages, which are as follows:

- 1. Students who experience the technical steps needed to produce effective multimedia documents will become better consumers of multimedia documents produced by others.
- 2. Students will learn the material included in a presentation in much greater depth than in traditional writing projects.
- 3. Students will work with the same information from four perspectives:
 - a) As researchers, they must locate and select the information needed to understand the chosen topic;
 - b) As authors, they must consider their intended audience and decide what amount of information is needed to give their readers an understanding of the topic;
 - c) As designers, they must select the appropriate media to share the concepts selected;
 - d) As writers, they must find a way to fit the information into the container, including linking to information for others to retrieve.

The present study addresses the following questions:

- 1. Is technology a good motivator in EFL classes?
- 2. Is there a significant difference between male and female students' ideas about using technology for better motivation in EFL classes?
- 3. Should language teachers use different technological devices to increase their students' motivation?

Definition of Multimedia

Multimedia can be defined as an integration of multiple media elements (e.g., audio, video, graphics, text, and/or animation) into one synergetic and symbiotic whole that results in more benefits for the end user than any of the media elements can provide individually. Multimedia can be defined in multiple ways, depending upon one's perspective. Typical definitions include the following:

- 1. Multimedia is the "use of multiple forms of media in a presentation" (Schwartz and Beichner, 1999: 8).
- 2. Multimedia is the "combined use of several media, such as movies, slides, music, and lighting, especially for the purpose of education or entertainment" (Brooks, 1997: 17).
- 3. Multimedia is "information in the form of graphics, audio, video, or movies. A multimedia document contains a media element other than plain text" (Greenlaw and Hepp, 1999: 44).
- 4. Multimedia comprises a computer programme that includes "text along with at least one of the following: audio or sophisticated sound, music, video, photographs, 3-D graphics, animation, or high-resolution graphics" (Kozma, 1991: 181).

The commonality among these definitions "involves the integration of more than one medium into some form of communication. Most commonly, though, this term now refers to the integration of media such as text, sound, graphics, animation, video, imaging, and spatial modelling into a computer system" (Jonasses, 2000: 207).

In the context of teaching, multimedia can be called integrated media, which consists of various media forms, such as text, graphic, animation, and/or audio used to browse, query, select, link to, and use information to meet students' requirements (Lu, Wan and Liu, 1999). Smith and Woody (2000: 220) defined multimedia as "the use of both visual aids and verbal descriptions to illustrate concepts".

A Brief History of Multimedia Use in Teaching

Multimedia applied in English teaching may include four stages. The original stage can be dated back to the 1950s, when only few foreign-language institutes started to employ phonographs, broadcasts, movies, and tape recorders in foreign-language teaching. During that time, these materials were considered to be a significant revolution to foreign-language teaching. Afterward, in the 1970s and 1980s, audio and video developed dramatically with the advancement of electronic technology. Electronic taping, slide projectors, videocassette players, language laboratories, and other electronic devices were included in this era (Mudge, 1999: 12–4).

By the beginning of the 1990s, multimedia technology was becoming increasingly available in foreign-language instruction because of the development of computer technology and the coming of the digital revolution. In the early 2000s, the Internet became a powerful medium for the delivery of computer-aided learning materials. The Internet provides a worldwide means of obtaining information, lightening the work-load, and communicating with others at any time and at any place.

Warschauer and Healey (1998) divided the history of computer-assisted language learning (CALL) into three stages: behaviouristic CALL, communicative CALL, and integrative CALL. Behaviouristic CALL, applied in the 1960s and 1970s, was based on the behaviourist theory of learning and featured repetitive language drills. Programmed Logic for Automatic Teaching Operations (PLATO), the best-known tutorial system, is a special hardware consisting of extensive drills, grammatical explanations, and translation tests at various intervals (Ahmad et al., 1985).

The next stage, communicative CALL, appeared in the late 1970s and early 1980s. This stage focused on the communicative teaching method and encouraged students to generate original utterances through the process of discovery, expression, and development, rather than only repeating prefabricated language. Students were supposed to make use of the computer in language learning (Ahmad et al., 1985: 478).

In this model, the computer is viewed as a stimulus (Taylor and Perez, 1989). Popular CALL software developed in this period included word processors and spelling and grammar checkers. Following this stage, integrative CALL included the development of multimedia computers and the Internet. This model integrates different technologies that serve as effective and comprehensive tools for language learning and teaching. With integrative CALL, teachers move away from the communicative perspective of teaching to a more social way, which emphasises the language used in authentic social environments. Applying a multimedianetworked computer provides students with an effective means of learning English (Taylor and Perez, 1989: 78).

With the advent of technology and the Internet, computer usage in language teaching provides an authentic environment in which students can communicate with native speakers inexpensively.

For instance, students can have rapid access to the background, such as grammatical or vocabulary explanations and pronunciation information, while the main lesson is in the foreground. Moreover, students in this model are usually encouraged to engage in their own language development rather than learning in a passive way (Taylor, 1980: 112).

According to Gong and Zhou (2007), certain teachers who are aware of the applicability of multimedia teaching tend to focus on flowery and fancy courseware and neglect the teaching aim, object, and content, so the entire English classroom becomes a demonstrating hall of computer functions (Gong and Zhou, 2007: 37).

Teaching has always been a "multimedia" enterprise; instructors have typically spoken aloud, drawn pictures, and attempted demonstrations for the benefit of their students. What has changed has been the evolving technology available for combining and delivering that information. The 1980s saw the introduction of overhead transparencies and videotapes, whereas the 1990s yielded the first CD-ROMs, the World Wide Web, and digital projectors with the mixed blessings of Microsoft PowerPoint. Technological innovation accelerated in the first decade of the new century, with digital projectors as standard features in most classrooms and CD-ROMs or DVDs accompanying many textbooks (Zhou, 2004: 71).

Literature Review

Several dozen studies indicate that computer-based multimedia can improve the learning and retention of material presented during a class session or an individual study period compared with traditional lectures or study materials that do not use multimedia (Bagui, 1998; Fletcher, 2003; Kozma, 1991; Mayer, 2001).

Bahous, Bacha and Nabhani (2011) investigated perceptions by interviewing students and surveying teachers in an EFL programme about the problems related to motivation that hinder students' learning in English classes. The researchers' findings show that learners were not motivated to learn English because of an overemphasis of writing skills, with very few new learning experiences, uninteresting materials, and unclear links between language courses and their majors or future careers.

According to Najjar (1996), the learning improvement accompanying multimedia can be mainly attributed to the *dual coding* of information presented in two different modalities—visual plus auditory, for example (Clark and Paivio, 1991; Paivio, 1986)—leading to increased comprehension of the material during the class session and improved retention of the material at later testing times (Mayer and Moreno, 1998).

There is general agreement that multimedia presentations are most effective when the different types of media support one another, rather than when superfluous sounds or images are presented for entertainment value. Superfluous stimuli may induce disorientation and *cognitive overload*, which could interfere with learning rather than enhancing learning (Mayer, Heiser and Lonn, 2001).

Lastly, several studies have suggested that student satisfaction and motivation are higher in courses that use multimedia materials (Astleitner and Wiesner, 2004; Yarbrough, 2001).

In one particularly large study, Shuell and Farber (2001) examined the attitudes of over 700 college students towards the use of computer technology in 20 courses representing a wide range of academic disciplines. Students were generally very positive about the use of

technology, although females rated the use of technology for learning and classroom instruction slightly lower than did their male peers.

Because the use of multimedia in teaching and learning leads to higher learning, Gilakjani (2012) discussed the relationship between multimedia and learning and stated that multimedia is a strong factor in English teaching, creating new roles for both teachers and learners in class.

Yang and Fang (2008) studied ways to improve students' competence in thinking and practicing using multimedia and the creation of context in optimising English-language teaching. The authors stated that using multimedia to create a context in which to teach English has unique advantages. The researchers explored the characteristics of multimedia and integrated how to use multimedia to optimise the context of English teaching as a purpose. These authors also found that eight principles of systematisation—authenticity, appropriateness, interactivity, coordination, interactivity, coordination, pluralism, intelligibility, and penetrability—are used for this purpose.

Method

This descriptive study is based on a questionnaire that was prepared for this specific purpose and was administered to 120 students pursuing a Master's degree at Med Seddik Benyahia University, Algeria, in June 2012. The students were selected from the same field of English studies but were at two different levels: 1^{st} -year and 2^{nd} -year.

The students were divided into two levels: 1st-year Master's degree, with 60 students (55 females and five males) and 2nd-year Master's degree, with 60 students (54 females and six males). The questionnaire was composed of 10 questions about motivation and technology use in EFL classrooms.

The questionnaire was as follows:

1-	Does the multimedia technology used in your classrooms motivate you about EFL?	Agree	Disagree
2-	Should multimedia technology be used for every lesson?		
3-	Do authentic materials downloaded from the Internet and used by teachers make the learning process active?		
4-	Do computer-based teaching activities make lessons more enjoyable?		
5-	Do you think that technological devices should always be used in EFL classrooms to increase your motivation?		
6-	Do lectures seem more interesting and enjoyable when the teacher uses Power Point presentations?		
7-	Does using multimedia technology every time make lessons interesting?		
8-	Do you think that tutorial videos, films, and CDs can be helpful for developing EFL skills?		
9-	Do you think that projects should be presented using multimedia technology?		
10-	Do you think that computer-based lessons are more enjoyable and effective than traditional lessons?		

Findings

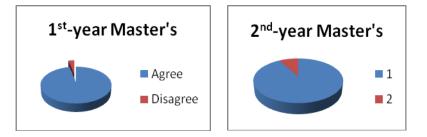


Figure 1 Does the multimedia technology used in your classrooms motivate you about EFL?

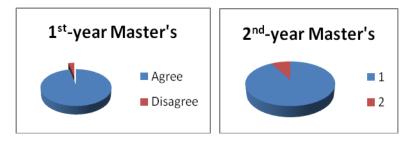


Figure 2 Should multimedia technology be used for every lesson?

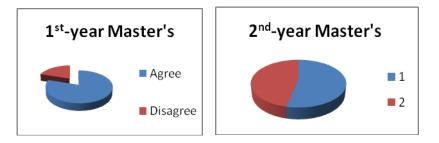


Figure 3 Do authentic materials downloaded from the Internet and used by teachers make the learning process active?

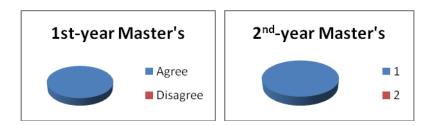


Figure 4 Do computer-based teaching activities make lessons more enjoyable?

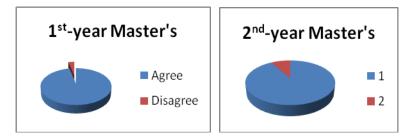


Figure 5 Do you think that technological devices should always be used in EFL classrooms to increase your motivation?

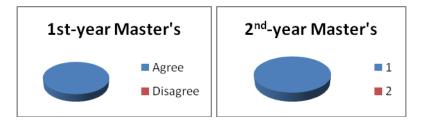


Figure 6 Do lectures seem more interesting and enjoyable when the teacher uses Power Point presentations?

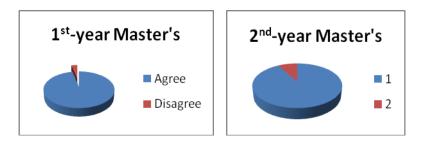


Figure 7 Does using multimedia technology every time make lessons interesting?



Figure 8 Do you think that tutorial videos, films, and CDs can be helpful for developing EFL skills?

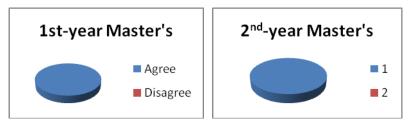


Figure 9 Do you think that projects should be presented using multimedia technology?



Figure 10 Do you think that computer-based lessons are more enjoyable and effective than traditional lessons?

Discussion of the Results

According to the findings, both 1^{st} - and 2^{nd} -year Master's students believe that the technology used in EFL classrooms motivates them, and 87.5% think that technology always increases their motivation about EFL. However, the regression in 2^{nd} -year Master's students shows that the method of using multimedia should be reviewed. The students were not taught using media during their studies for the Bachelor's degree. Thus, perhaps we should make use of multimedia progressively.

In total, 94% of the students believe that EFL would be improved if technology were used for every lesson. For this question, we also saw a slight decrease that was related to studying for the Bachelor's degree. Thus, we should strengthen the use of multimedia before graduation. According to the students, this change will arouse their interests in EFL and make them attend every class, and they will not miss any lecture because of the different technological devices used and the different presentation of lectures.

In total, 66.66 % of the students believe that what teachers download from the Internet is ineffective. This result is very encouraging and shows that a downloaded projection block of documents is less appreciated by students because this material negatively affects their learning process. According to students, teachers still have a great responsibility, and authentic materials cannot completely replace teachers in class. Additionally, teachers must be skilled enough to use Information and Communication Technologies (ICTs) and should know how to plan lectures with the new materials of technology. Additionally, the students believe that computerbased classrooms make lessons more enjoyable and agree that these classrooms never make lectures boring and unnecessary. In contrast, multimedia and technology provide students with the ability to understand the lectures better.

To improve their understanding and learning process in EFL, 92.5% of the students agree that technological materials are always needed in classrooms. These students want to see different technological devices used for motivation. This finding justifies our interpretations of above results that summarise the regression to the way that the media is used. All students agree that lessons and lectures can be more enjoyable with Power Point presentations. For example, I have been teaching a class on research methods to these surveyed students and have been using different Power Point presentations in class for three years. Accordingly, the students enjoy the lectures presented through Power Point and have no difficulties in understanding these presentations.

Additionally, 95% of the students agree that technology always makes lectures interesting due to the different ways used to present lectures and the visual aids used in teaching. For instance, when studying research methods, students who do not know what is meant by research paper formatting better understand after watching tutorial videos that show how to format a research paper and how to select the margins.

All of the students agree that tutorial videos always make lectures easy to understand because these videos provide several practical ways of how to act or solve problems in EFL.

In total, 75% of the students believe that technological devices should be used to present research based- projects. This result shows that through the computer, a course can be prepared and presented in different ways. The possibilities offered by digital computers make a course more interesting. Several students had already practised presenting their research projects using several visuals aids and Power Point presentations, which was appreciated by their teachers and colleagues.

Conclusion and Recommendations

This research has proven that using technology in class can be a highly motivating factor for students. Technology offers many benefits to enhance education. Most importantly, technology integration has the potential to increase students' motivation. All students attend the class regularly because the course seems interesting, in contrast to the traditional classroom environment, which seems boring and for which the students lack the skills necessary to succeed. The course uses certain materials to promote knowledge and understanding: Power Point presentations, tutorial videos, and audio files.

Because they were working with technology, the students felt confident in their ability to accomplish their tasks due to their familiarity with the technology. The students presented their exposés in class through Power Point presentations and videos downloaded from the Internet. The students were excited about the opportunity to test their skills and viewed the task as challenging and engaging. Additionally, EFL students want their teachers to use technology in their classrooms. Most of the students using technology become more motivated and note that the most important equipment is a computer-connected projector in classrooms.

In this research, it was also found that foreign-language learning seemed to be affected by different technological equipment, such as computers, projectors, video, films, and multimedia. Students' responses have shown that there is a strong relationship between language learning motivational factors and using technology.

In conclusion, the use of technology in EFL classrooms provides a meaningful and interesting process for language learning, and students are more motivated by this technological development in EFL classrooms. According to the results of the study, the following suggestions are presented:

- 1. Technology should be included in the English-language curriculum, creating a lively classroom atmosphere and facilitating learning.
- 2. Instructors at universities should focus on the importance of using technology and should use authentic and interactive activities for maximum success in EFL classrooms.
- 3. Materials that are available on the Internet should be selected according to the needs and interests of the students.
- 4. Teachers should not think that using technology is the only solution for good motivation; lessons should be based on well-designed technological classrooms and pedagogical considerations.
- 5. A good teaching-learning process should be supported by technological equipment, which will enhance students' interest.
- 6. Language learners can be encouraged to use distance education for active learning.
- 7. Students should be encouraged to use computers and other technological devices; these efforts can increase students' motivation in English courses, and thus, effective and successful goals can be achieved.

References

- Acha, J. 2009. The effectiveness of multimedia programmes in children's vocabulary learning. *British Journal of Educational Technology* 40(1): 23–31.
- Ahmad, K., G. Corbett, M. Rogers and R. Sussex. 1985. *Computers, language learning and language teaching*. Cambridge: Cambridge University Press.
- Ainsworth, S. E. 1999. A functional taxonomy of multiple representations. *Computers* and Education 33(2/3): 131–152.
- Astleitner, H. and C. Wiesner. 2004. An integrated model of multimedia learning and motivation. *Journal of Educational Multimedia and Hypermedia* 13: 3–21.
- Bahous, R., N. Bacha and M. Nabhani. 2011. Motivating students in the EFL classroom: A case study of perspectives. *English language teaching* 4(3). The Canadian Center of Science and Education. http://www.ccsenet.org/journal/index.php/elt/ article/view/11873/0
- Bagui, S. 1998. Reasons for increased learning using multimedia. *Journal of Educational Multimedia and Hypermedia* 7: 3–18.
- Brooks, D. W. 1997. Web-teaching: A guide to designing interactive teaching for the World Wide Web. New York: Plenum.
- Clark, J. M. and A. Paivio. 1991. Dual coding theory and education. *Educational Psychology Review* 3: 149–170.
- Fletcher, J. D. 2003. Evidence for learning from technology-assisted instruction. In *Technology applications in education: A learning view*, eds. H. O'Neil. F. Jr. and R. S. Perez, 79–99. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gilakjani, Pourhosein Abbas. 2012. The significant role of multimedia in motivating EFL learners' interest in English language learning. *International Journal of Modern Education and Computer Science (IJMECS)* 4: 57–66, doi: 10.5815/ijmecs.2012.04.08
- Gong, W. and W. Z. Zhou. 2007. Thinking on the application of multimedia into college English teaching. *US-China Foreign Language* 5(4): 36–38.
- Greenlaw, R. and E. B. Hepp. 1999. *In-line/On-line: Fundamentals of the Internet and the World Wide Web*. Boston: McGraw-Hill.
- Johnstone, J. and L. Milne. 1995. Scaffolding second language communicative discourse with teacher-controlled multimedia, *Foreign Language Annal* 28: 315–329.
- Jonasses, D. 2000. Computers as mindtools for schools. Upper Saddle River, NJ: Merrill.
- Kozma, R. 1991. Learning with media. Review of Educational Research 61: 179–211.
- Larkin, J. H. and H. A. Simon. 1987. Why a diagram is (sometimes) worth ten thousand words. *Cognitive Science* 11(1): 65.
- Lu, G., H. W. Wan and S. Y. Liu. 1999. Hypermedia and its application in education. *Educational Media International* 36(1): 41–45.
- Mayer, R. E. 2001. Multimedia learning. New York: Cambridge University Press.
- Mayer, R. E. and R. Moreno. 1998. A split-attention effect in multimedia learning: Evidence for dual processing systems in working memory. *Journal of Educational Psychology* 90: 312–320.
- Mayer, R. E., J. Heiser and S. Lonn. 2001. Cognitive constraints on multimedia learning: When presenting more material results in less understanding. *Journal of Educational Psychology* 93: 187–198.

- Mayer, R. E., J. L. Plass, D. M. Chun and D. Leutner. 1998. Supporting visual and verbal learning preferences in a second-language multimedia learning environment. *Journal of Educational Psychology* 90: 25–36.
- Mudge, S. M. 1999. Delivering multimedia teaching modules via the Internet. Innovations in Education and Training International 36(1): 11–16.
- Najjar, L. J. 1996. Multimedia information and learning. *Journal of Multimedia and Hypermedia* 5: 129–150.
- Nunan, D. 1999. Second language teaching and learning. Boston: Heinle & Heinle Publishers.
- Paivio, A. 1986. *Mental representations: A dual coding approach. Oxford, England:* Oxford University Press.
- Penney, C. G. 1989. Modality effects and the structure of short-term verbal memory. *Memory and Cognition* 17(4): 398.
- Rubin, D. B. 1987. *Multiple imputation for non-response in surveys*. New York: J. Wiley & Sons.
- Schwartz, J. E. and R. J. Beichner. 1999. *Essentials of educational technology*. Boston: Allyn and Bacon.
- Solanki D. Shyamlee. 2012. Use of technology in English language teaching and learning: An analysis. Paper presented at the International Conference on Language, Medias and Culture. IPEDR vol.33. IACSIT Press, Singapore.
- Shuell, T. J. and S. L. Farber. 2001. Students' perceptions of technology use in college courses. *Journal of Educational Computing Research* 24: 119–138.
- Smith, S. M. and P. C. Woody. 2000. Computer in teaching: Interactive effect of multimedia instruction and learning styles. *Teaching of Psychology* 27(3): 220– 223.
- Sweller, J. 2005. Implications of cognitive load theory for multimedia learning, In *The Cambridge Handbook of Multimedia Learning*, ed. R. E. Mayer. New York: Cambridge University Press.
- Taylor, M. and L. Perez. 1989. Something to do on Monday. La Jolla, CA: Athelstan.
- Taylor, R. 1980. *The computer in the school: Tutor, tool, tutee*. New York: Teachers College Press.
- Warschauer, M. and D. Healey. 1998. Computers and language learning: An overview. *Language Teaching* 31: 57–71.
- Weiyan Yang and Fang Fang. 2008. Optimization of multimedia English teaching in context creation. *International Education Studies*. 1(4). http://www.ccsenet.org/ journal/index.php/ies/article/view/636
- Yarbrough, D. N. 2001. A comparative analysis of student satisfaction and learning in a computer-assisted environment versus a lecture environment. *Journal on Excellence in College Teaching* 12: 129–147.