

A Multimedia Based Web Application for e-Learning

Reyazur Rashid Irshad

Lecturer,
Department of Computer Science,
College of Science & Arts, Sharurah
Najran University, KSA
Email: rrrirshad1 [AT] gmail.com

Aamir Fatahayab

Research Scholar,
Department of Computer Science and Engineering
JJTU, Jhunjhunu,
Rajasthan, India
Email: aamirfatah1 [AT] yahoo.com

Abstract – eLearning is being defined as the process of training where there is a use of digital mediums for the better access of the educational data, which is quite different from that of the old style of learning or the conventional one. In many of the works and reports e-learning is also defined as the course or session which is made available online or on the digital platform. Multimedia is extensively used for education and training in schools, business and at home. The modern development in the multimedia along with the development in the field of software and hardware enhanced the medium of learning and also have considered the requirement of the individuals by the technology. It enhances the quality of education. It provides an advanced way for the trainers for the enhancement of the learning process. The work presented in the paper describes the e-learning and learning using multimedia for which a website for language learning is being considered. The work also focuses on the impacts of the same for which the user's reviews and past studies are considered.

Index Terms – e-learning, multimedia, Students, languages, Web.

I. INTRODUCTION

Multimedia is one of the commonly considered terminology know a day by the researchers. When considering the clear definition of the term multimedia where the grouping of the certain informational representation format or mass media like text, audio, video and also can refer to the development of the hardware and software system in a way that it is able to enhance the learning level of the individual. That means in broad sense the term multimedia is being considered as diversity for the information level; representation.

Multimedia is being defined the integration of the various formats like video, audio, graphics and making the normal computer system capable of generating the attractive presentation [1].

The search for effective teaching and learning methods has progressed through the use of various media, including text, radio, broadcast TV, audio and video tape and early incarnations of computer assisted learning. Text and work books are useful for some aspects of drill and practice, but they neglect the need for meaningful, learner generated written and verbal communication in practical contexts. TV and video still demand a passive, spectator like mode of study which

does not produce the purposeful interactions with real audiences and active learner involvement which recent studies have found to be most effective [2].

Computer assisted language learning (CALL) has made significant advances towards finding a solution and to changing the way that language courses are conceived and taught. Early CALL developments tended to follow behaviourist pedagogies and produced electronic imitations of drill and practice workbooks which added some novelty value and usually little else. With the communicative theories of the 1980s came the realization that culturally and experientially much richer. The outcome was 'communicative CALL' and the first real steps towards opportunities for language learners to communicate and receive immediate, meaningful feedback [3].

Use of Multimedia in Language Learning:

The era going on is all about the digital part where almost every segment of the day to day life is being taken digitally hence the digital mediums can also be used to enhance the level of learning for the students. The e-learning makes the students to better grab the ICT. So as to improve the writing habit of the student it is always asked to write the things over and over again. The work of rewriting is just made simpler by the use of the editing tools. The things from the students side can be considered for the target audience as it is quite impressive. The digital multimedia formats makes them to consider the different pictures, text and many more to make the things more attractive and presentable, includes the things like audio, video and use of the digital cameras. The interaction of the learner with the computer cannot be bided means it can be made available when needed and also for required time slot and also, they can start and stop the process when it is required [4].

Many students will find multimedia learning materials interesting. Some students, however, will benefit more than others. Multimedia is most beneficial to those students who need authentic materials, who desire independent study and who have the ability to manage open learning.

Multimedia provides numerous features especially for successful second language learning. Among these are 'noticing' (salience in target items); an interactive environment; more comprehensible input; rich context; 'negotiation of meaning' (clarification requests, confirming understanding,

checking for comprehension) and 'requests for modification' (via online dictionary lookup, using glosses, highlighting, subtitles); and "comprehensible output" (multimedia+task is especially effective) [5].

Use of Multimedia by Teacher:

Multimedia materials offer numerous advantages for those who teach in foreign language settings. Multimedia materials often provide greater authenticity than text alone. Teachers in second-language settings could also enhance instructions using multimedia. For those who can afford the technology, rich, efficient learning is possible.

Instructors could employ multimedia either for core or supplementary study. It is recommended that teachers evaluate the design quality of the multimedia applications. Key design features include user shut-off controls and animation that is both relevant and limited. The instructional design should provide recycling of pedagogical target items: frequency helps learning.

Contextual saliency and follow-up tasks should also be featured. Brett found multimedia improved language achievement in certain applications. In effective designs, multimedia first promotes noticing, then users must "negotiate meaning" by taking some kind of actions (such as accessing additional information or completing tasks). Brett posits that language learning is a two-step process of noticing followed by meaning negotiation.

Instructors should anticipate changes in teacher/student roles. As students grow accustomed to independent learning, their attitudes may change towards authority figures. The learners may become more knowledgeable about technology than the teacher. This may be uncomfortable for authoritarian types and for students from authoritarian cultures. Egalitarianism might not be welcomed in more traditional learning environments. Students and teachers should evaluate the advantages of a learning partnership.

II. LITERATURE REVIEW

The objective of the study is to get acquainted with the tools to preserve foreign language trainers who have exposure of technological aspects for the learners. The author have also presented the basic information about such tools and also have described the basic usage of the tools. The study and the work presented in the study is for the better transfer of the facts and considerations related to the teaching segment and also for the FL class rooms. It is additionally utilized for planning exercise intends to help jam outside language instructors in the production of test exercise designs that incorporate FL interchanges innovations in their educational program [6].

The survey of this paper prompts numerous principle discoveries, as Academic listening assignments are regularly tried as opposed to educated; video offers outside and second language students an opportunity to enhance their capacity to comprehend conceivable info. Recordings enable educators to ask both presentation and referential inquiries. Video

assignments utilized in the F/SL classroom can incorporate yet are not constrained to making propelled coordinators, other visual representations and descriptors. With the increase in educational technology, video is no longer detained in the customary classroom; it can without much of a stretch be ventured into the PC helped learning lab [7].

This paper explores the effect of the Internet on the Collaborative Project in the instructing and learning of present day languages. The examination is put in setting by following the improvements in language taking in methodologies from the sound lingual, through to the psychological, informative lastly the post-open methodology that is in vogue today. It follows the parallel improvements in mechanical advancements in so far as they identify with dialect instructing and learning, from the Language Laboratory (which failed), to the introduction to CALL software (about which there are serious doubts), to the advent of the Internet, which seems to have found a niche where language teaching and learning are concerned [8].

The findings from the study suggest that generally the Internet can play a very significant role in modern language teaching and learning. A major strength of the Internet is that it provides real-life communication with native speakers of the target language and speedy access to up-to-date information from and about the target culture. The Internet takes into consideration educating and figuring out how to be liberated from the limits of customary classrooms [9].

III. BUILDING A E-LEARNING WEBSITE

For the better and effective development of the website which will deal with the educational learning or considering the training of any language. The work goes with the development of the websites considering the limited availability of the resources (financial) and technical as well. The basic steps that are to be considered for the development can actually very because it highly depends on the nature of the development.

Step One: Survey already Working Websites:

First step in the development of a language learning website is the exploration of the websites which are having same segment or we can say they provide the same short learning practice.

Step Two: Decide on the purpose and objectives of the websites:

In the second step of the development the things have to be carried out in basic ways to cover almost everything needed instead of considering too much. By which the depth of the idea can be reached instead of breadth. The development should follow the area which is not yet development and try to explore out the facts [10].

Step Three: Determine limitations and users reactions to technology:

For the development of the online language learning tool it should be very much clear that what should be possible to

consider online and what can't be. Two factors which are to be considered are as under:

- a) Technology is well enough for the development of the multimedia based on web,
- b) Understanding the requirement and reactions from the user's side and also the understandability.

Step Four: Procuring the right equipments needed:

By using the required softwares and tools at the early stage of the development will reduce the overhead at the end of the process for example it is always hard to consider the audio files which are recorded poorly.

Step Five: Preparing the content required in the websites:

Now, we need source material on which to base our recordings. The existing equipments can also be used for which proper rights making is to be considered and also we can for our own design. As the new formation of the sound tracks is a time taking process because of which many goes for the usage of the already existing part.

Step Six: Recording, editing & storing media files:

Next, we need to record our audio tracks for the different platforms like windows and Macintosh which make as to consider the things in as many as possible formats

Step Seven: Encoding the media files required to be uploaded for the internet:

Once we have recorded and edited our source audio, we can encode the things to be used over the web. In the case when the encoding of the original file is considered then the size of the file actually degrades. In the market there are several options available to encode like realnetwork.com for online conversion. [11]

Step Eight: Make the media files available to users online:

- Hosting Files
- Choosing Deliver Format

Step Nine: Play the media files:

Visitors have a few choices for playing our media records. RealNetworks offers a fundamental, free player and a business one with somewhat improved player controls and access to online media programming. Another choice for tuning in to online media documents and recording our own voice is the Device Interactive Audio Video Recorder, a business item by Device Learning Solutions.

Step Ten: Troubleshoot playback problems:

Indeed, even after we have made our media and have transferred it to the Internet, there are times when things simply don't appear to fill in as we expected or they work for us yet not for our guests. In view of my experience, there are

various regular issues guests experience when attempting to play media.

Step Eleven: Evaluating the work & willingness to revise:

Looking for remarks from visitors and being willing to adjust, update or rub thoughts are enter components in building up a powerful site. Try not to hope to make everything without flaw the first or second time and don't get excessively appended, making it impossible to each part of our unique thought [12].

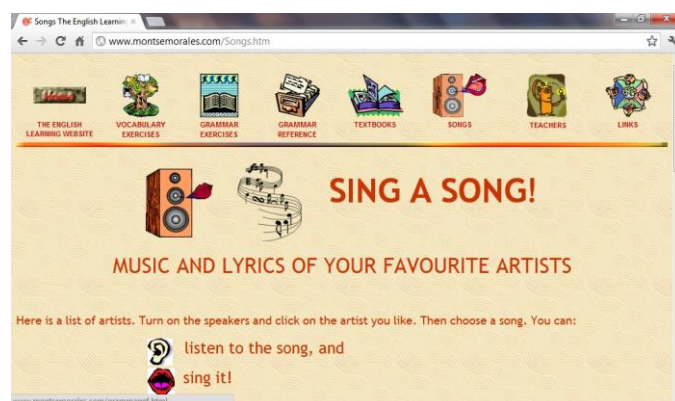
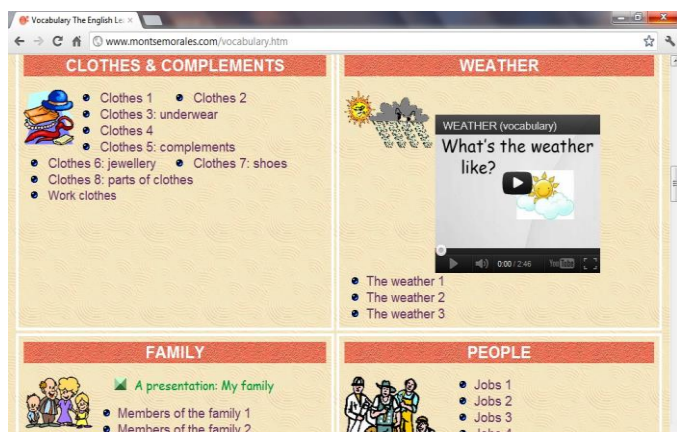
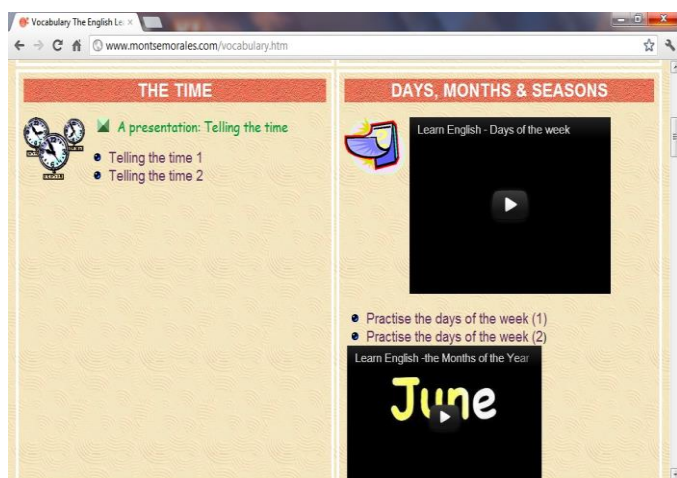
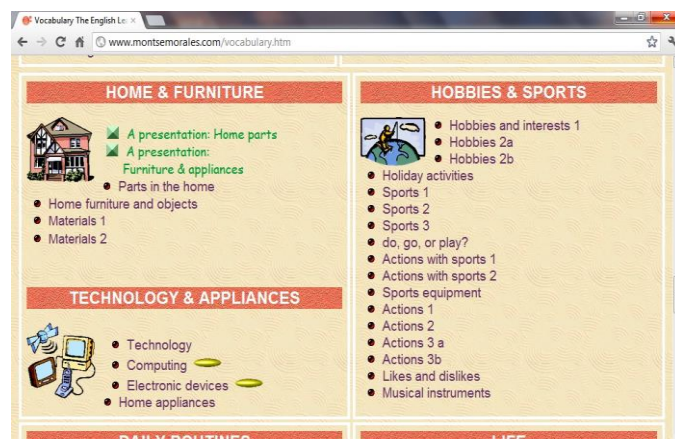
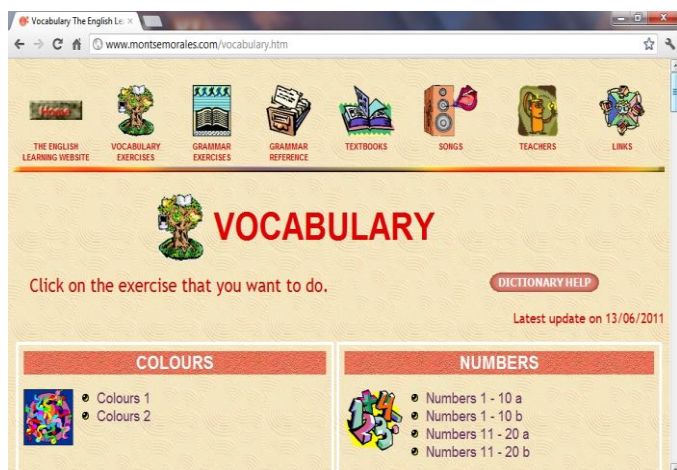
There are many websites available through which we can learn various languages. Some examples relating to these websites are given below:

- English: <http://www.montsemorales.com>
- Arabic: <https://www.madinaharabic.com>
- Hindi: <http://www.hindikibindi.com>
- Punjabi: <http://advancedcentrepunjabi.org>
- Sanskrit: <http://sanskritdocuments.org>

These websites help students as well as teachers to learn and teach a particular language. Here are some screenshots of above said websites:

Screenshots:





IV. ANALYSIS OF THE WORK

The efficiency and reliability of the e-learning websites was analyzed on the basis of the user's input and also some of the past studies are also considered. Following are the reviews for the same:

On the basis of the survey conducted by the many of the researchers and also during this work the output for the part to check whether the technology is appropriate was that the most of the students and even the teachers were feeling comfortable and also were in the favor of the technology. Teachers also showed a great interest and understanding about the potential

future benefits of using technology in their educational practices. Another positive aspect of their high TK is that they understood the importance of, and were able to use, not only one but various learning technologies. Whether or not teachers conformed to a specific pedagogical viewpoint, they all expressed strong beliefs about what pedagogical strategies are most effective to use when teaching their subject. The pedagogical strategies the teachers believed in have clear connections with modern views of education where the students are active participants. And also on the basis of the critical analysis of the field following are the advantages and the disadvantages of the e-learning:

Advantages Of eLearning

1. The things can be made available in many of the multimedia formats as per the requirement.
2. The classes or the courses can be made available online.
3. The tools are just flexible and convenient that they can be accessed from anywhere and anytime.
4. The web-based learning is available for almost segments of the learners like part-time students or for those who are working.
5. E-learning is an independent and active mode learning process.
6. The thing which is required is the internet available by which you can access the learning data anytime and from anywhere.
7. The anytime and anywhere availability of the learning data makes the learners independent for learning.
8. The learning tools available can be considered regularly and also can be like just consider when you have time to do so.
9. In almost all of the e-learning tools there are certain teams and boards which are always available and also can interact with other using the same tool for any of the doubts.
10. The audio and video format of the learning data makes the learners to hear or to watch the things again and again till the time they are not comfortable with the same.

Disadvantages Of eLearning

As per the usage and features of the e-learning there are not much of the demerits of e-learning process, some of them are like face to face interaction is missing, and sometimes it is hard to keep the things in practical after learning it theoretically.

1. The exam formats available online are generally in the form of the objective outputs.
2. The security of the online tools are also sometime compromised.
3. The access of the learners work which is termed as authenticity for any of the online tool is the big issue in the case of the e-learning.
4. The assessments that are computer marked generally have a tendency of being only knowledge-based and not necessarily practicality-based.

V. CONCLUSION

The present study concludes that e-learning has a significant future in education. The body of research accompanying its continual development is aiding considerably in improving the effectiveness of these technologies as a delivery medium. As a new medium, some of the instructional design that accompanies materials development is pioneering and innovative. The usage of the different multimedia formats in the learning process of the students can enhance some of the skills of the students. It just widens the knowledge about the ICT information of the learner. The availability of the editing tools have reduced the efforts of rewriting by the student and also the anywhere anytime availability of the tools makes it better and common for use.

REFERENCES

- [1] Lomicka, "To Gloss or not to Gloss: An Investigation of Reading Comprehension Online. Language Learning and Technology", vol. 1(2), pp. 41-50.
- [2] Egbert & Jessup, "Analytic and Systematic Analysis of Computer Supported Language Learning Environments", TESL- EJ, vol. 2(2), pp. 1-24.
- [3] Brussino, "Developing a Multimedia Component For a Foreign Language Course (Occasional Paper No. 7)", Institute of Language Teaching and Learning, University of Auckland.
- [4] <http://www.questia.com/pm.qst?a=o&d=101260082>.
- [5] Chun & Plass, "Effects of multimedia annotations on vocabulary acquisition", Modern Language Journal, vol. 80(2), pp. 183-198.