

An Evaluation of the Usefulness of the Internet in the EFL Reading Comprehension Classroom

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Abstract

The Internet is all about sharing ideas with others. It offers a myriad of authentic materials and ample opportunities to communicate in the foreign language. It fits into current theories of communicative language learning and learner autonomy.

This paper attempts to address the major issues teachers and universities will encounter when integrating the Internet into foreign language curriculum, and it is mostly concerned with the effect of Internet on teaching reading comprehension.

Therefore, the main purpose of this study is to find justifiable responses to the following questions.

1. Will the student improve their attitude toward reading comprehension in English as a foreign language (EFL) after being taught via the Internet?

2. Will the teaching of reading comprehension via Internet yield significantly better results than traditional, non-Internet techniques?

3. Will an evaluation of the usefulness of the Internet in EFL reading classes help EFL teachers and students in the future?

This paper can be good starting point for EFL instructors and universities alike, and as such it explores a number of major issues and provides both theoretical background information and practical suggestions.

Introduction

This quantitative report is written as a reflection on a study in which the Internet was used to conduct a virtual university level reading course in English as a foreign language.

It will provide a review of the existing published literature on the Internet and the current online discussion about reading comprehension. In addition, there will be a discussion of the history of computer-assisted language learning (CALL) and a comparison of the traditional ways of teaching reading versus using hypertext and Internet-mediated reading. And it will give the methodology of the study upon which the research was based, data collection, and description of the unique benefits of teaching and learning English reading comprehension online, taking into account both the students and the instructor's perspectives. The paper concludes with a brief look at the role of the learning facilitators in EFL reading

1. Computer assisted Language learning (CALL).

The first area of research, CALL, has gone through three stages, each new stage building on the experience of the previous stage, and then incorporating new insights which appear together with advances in the technology available.

1. The first stage is called behaviourist CALL: Mainframe computers were used as tutors for extensive drills, explicit grammar instruction and translation tests.
2. The second stage is called Communicative CALL. The mainframe was replaced by personal computers, this form of computer based instruction corresponded to cognitive theories which recognised that language learning was creative process of discovery, expression and development.
3. The third stage called Interactive CALL makes use of the latest Internet technology that changed the role of the computer from a tutor, stimulator or information processor to a tool for communication.

2. The Internet

The Internet was originally set up in 1960s by the United State's Army and consisted of a small computer network that linked four sites, permitting users to share resources and send information from one site to another. The US government, which owned the Internet, decided to link university computers in the states in 1970s. From then, the Internet continued to grow and now it does not belong to anyone anymore.

With the arrival of the Internet the computer is no longer just a tool for information processing but a tool for communication. According to Warschauer and Healey (1998) this communication can be synchronous (real-time) or asynchronous (email). Synchronous communication can be

achieved either by specific software programs for local area networks or via the Internet, using the Internet Relay Chat (IRC), for instance.

Generally, asynchronous communication is carried out by email, although other tools may be used, such as bulletin boards and news groups.

Internet Tools and Resources.

- The World Wide Web
- Email
- Usenet (news group)
- Mailing lists
- Real time communication (Internet relay chat)

1. The World Wide Web

The World Wide Web is the most recent arrival on the Internet scene. It combines most of the applications that have been used on the Net in the past and introduces some new ones. These new features are interactivity, multimedia, and hyperlinks (following links by clicking on them). In addition, it offers a graphical interface that is easy and straightforward to use. The creation of information is also simple. This explains the immense popularity of the WWW and why it is the fastest Internet facility at the moment.

To use the WWW, one needs an Internet connection and a WWW client program. The Web browsers communicate with the Web server of one's Internet Service Provider (ISP), which in turn is indirectly connected to

computers and networks all over the world. This way information can be retrieved from every computer that is linked to the Internet. The Internet's strength is the availability of vast resources. The WWW contains information on any subject one can imagine.

There are three kinds of search tools available to facilitate locating Web sites on the WWW. The first category includes search engines. These search tools are actually Web pages themselves, and use "crawlers" or "spiders" to scan the Web for new sites. They can search through the entire page and make indices of found words. When someone performs a search, the keywords are matched with the words in the index, and the engine comes up with a list of Web pages that contain the keywords.

The second category consists of Internet directories. Humans create these sites. The sites have to be submitted and they are then categorized and sometimes judged by editors. To perform a search, one can browse through the subject trees and hierarchies of categories until finally a list of sites that belong to a specific category can be consulted.

Meta-search engines make up the last category. These enable users to submit a keyword search to more than one engine at the same time. In other words, these engines do not have indices themselves, but rely on others to produce results.

2. Email

E-mail means electronic mail and from a user point of view it is very straightforward. As Haworth (1995) points out, it is a “bread-and-butter Internet application.” Its first and foremost advantage is its ease of use. Everyone, who has an Internet account, also has an e-mail address. All one needs is an e-mail client program and worldwide communication is within one’s grasp. These e-mail applications allow users to compose messages off-line and then send them. This makes e-mail one of the cheapest Internet tools. Moreover, it makes traditional mail more or less redundant and compared to it, e-mail is fast, and there are no material costs, such as paper or envelopes. In addition, e-mail programs include several useful functions that enhance effective communication. Among other things, e-mail applications can do the following: send and receive new mail, save mail to a file system, reply to a message received, include parts of previously received message responses, and forward mail, (Leloup and Ponterio, 1995). Another useful aspect is the possibility to send file attachments with e-mails. This means that any file on one’s computer, such as a Word document, can be sent to anyone who has an e-mail address.

3. News Groups

Usenet is a computer-based discussion system that is widely distributed on the Internet. It may be thought of as a global blackboard that is divided

into sections. Anyone can write a message on it, and the messages may be read by anyone interested. After a few days, old messages are wiped off to make room for new contributions. To use Usenet, one must have access to a news server, also called a NNTP (Network News Transfer Protocol). A NNTP server is a machine that collects postings, sorts them, and passes them along to other servers. Most Internet Service Providers offer Usenet.

4. Mailing List

Mailing lists permit groups of people to discuss issues, share information, or ask questions related to a common topic via e-mail. They are based on computer programs, which enable users to send an email message to the list, which is then transmitted to all members. There are several types of computer programs, such as Listserv and Mailbase, but they include the same functions. The software automatically handles new subscribers, sends out instruction, and suspends the service to users while they are on holiday, etc. To join a list, an e-mail message containing the command `SUBSCRIBE<name of list>` should be sent to the server.

5. Real-Time Communication

Internet Relay Chat (IRC) is one of the best known examples of what the Net has to offer with respect to real-time communication. It is a multi-user chat system written by Jarkko Oikarinen in 1998. IRC permits people to gather in-groups, called “channels” to talk about specific subjects. Private conversations are also possible. IRC permits users to

communicate by splitting the screen into two parts. In the bottom half the user writes his or her contribution and upon pressing the Enter key, the message appears in the top half so that the others who are on that particular channel can read it and react to it.

3. Traditional (E) FL teaching vs. internet-assisted (E) FL teaching

Disadvantages of traditional FL teaching

Goodwin and Jones (1998) list many disadvantages of FL teaching. It is criticised for:

1. being old-fashioned, boring, incomplete
2. using textbooks that are written in artificial styles and include exercises that make no sense and do not concentrate on language proficiency
3. using non-authentic material
4. lacking variety

Tudor (1996) also states that in traditional teaching communication play a secondary role, students remain passive and the needs of learners are ignored. **Harris (1997)** argues that the constant process of correcting students in traditional FL teaching is unnecessary as it is natural to make mistakes when learning a language. It also inhibits students' progress.

The Internet, according to **Goodwin and Jones (1998)**, can solve these problems. It can be used as a supplement to, and improvement of,

traditional FL teaching. **Harris (1997)** says that the Internet allows learners to be more active. It also takes into account differences between learners. They're many more benefits to internet-assisted teaching.

Benefits of Internet in FL teaching

Roger (1998) states that teaching material, which is abstract by nature, is more 'real-life' and relevant to the outside world when taken from the web. Students are able to apply language theory in practice. As a result, fewer students fail in the subject. **Frizler (1995)** and **Warschauer (1996)** state that students are more motivated to learn when given more authentic and thus attractive material. Furthermore, the **British Council (1995)** concludes that any site written in English is a valuable source for EFL teaching. The material does not have to come from an EFL site. This means there is a limitless amount of suitable material available on the web

Van Assche (1998) defines three other benefits of using Internet in FL teaching:

1. information highway knowledge permits students' to succeed in an information world
2. the "exploration" method of teaching means students gain a deeper understanding
3. interaction with other cultures creates respect and destroys prejudices

Internet-assisted FL teaching involves the development of communication skills (**Berge and Collins, 1995**). Similarly, **Leloup and Ponterio (1998)** state that language is for the purpose of communication in internet-assisted FL teaching.

Other benefits mentioned by **Leloup and Ponterio (1998)** are that Internet material is up-to-date and includes visuals, which stimulate the FL learner even more. According to **Haworth (1995)** stated that it is a 'living' entity that encourages active participation. It also develops the student's general academic skills such as 'discriminating between a mass of information' (**Haworth, 1995**).

Harris (1997) explains that, unlike traditional FL teaching, internet-assisted FL learning reduces rather than enhances the complexity of real language. **Frizler (1995)** points out that Internet-assisted FL learning requires a student-centred classroom. This supports current pedagogical theories of integrative learning.

Morth (1998) describes the role of a teacher in a student-centred classroom as a 'coach' who must stimulate the students to learn by themselves. **Berge and Collins (1995)** make the essential observation that the more students do for themselves, the more they will learn. In **Kalian's** view (**1994**) a student-centred classroom provides a more balanced relationship between teacher and students. This allows teachers and students to become closer.

All these comments, and more, agree with **Raimes' (1983)** paradigm-definition of language teaching which:

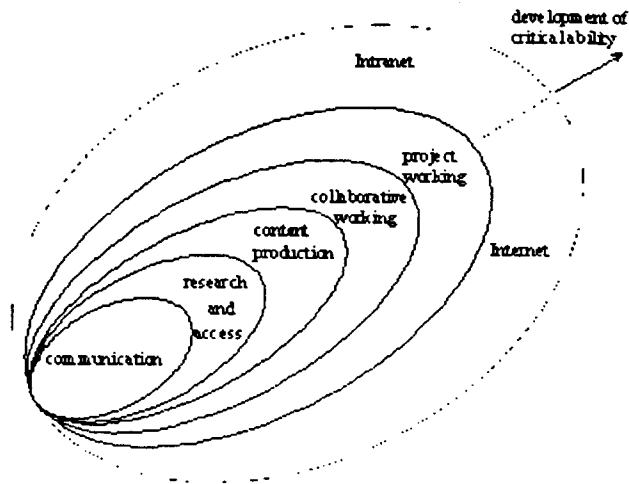
1. sees language as communication
2. emphasizes real language use
3. recommends a student-centred classroom
4. encourages real language acquisition instead of just learning a set of grammatical rules
5. develops humanistic, interpersonal approaches
6. considers the nature of the learner, the learning process, and the learning environment

This means that internet-assisted learning meets the objectives of FL teaching.

Practical advice about internet-assisted FL teaching

Willis (1997) provides a framework that shows teachers how they can support learning processes. It involves:

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1. basic communication between individuals
2. doing research and accessing/collecting information and data
3. content production: making and publishing students' own homepage using HTML
4. project work on aspects of language, culture and literature
5. collaborative work (interactive participation)
6. knowledge of information and communication technologies (internet and intranet)
7. development of 'critical' skills

Willis suggests that potential language teaching material should be critically evaluated following a certain model. This model involves four essential stages:

1. Students develop a research protocol where they establish:

- the topic
- potential sources of info.
- evaluation criteria
- a report format

2. Teacher evaluates protocol and changes it where necessary
3. Student carries out research/planned activity. Then he/she produces a report according to the protocol.
4. Teacher considers the outcome(s) of the activities and discusses the report

This model allows the teacher to monitor the student's progress and control the student-centred classroom without being too involved. It also clarifies the roles that teacher and student play in a student-centred classroom.

Leloup and Ponterio (1996) state that lessons and activities in internet-assisted FL teaching must support or enhance the student's curriculum. Of course to do this, teachers need to have good knowledge of the curriculum. Leloup and Ponterio outline three processes of searching the Internet:

1. identifying material that will support a planned lesson
2. looking for material that may be useful in the future
3. expanding a collection of potential material by bookmarking sites

Finally, **Harris (1997)** offers a 'SCAD' checklist for evaluating a website. SCAD is an acronym for; Source, Content, Access and Design.

4. Reading comprehension

i. Electronic reading material (hypertext)

Vannevar Bush first proposed the concept of hypertext in 1945. However, the actual term “hypertext” was not coined until the 1960’s. Nelson did this. According to Nelson, “Hypertext” is non-sequential reading and writing that is displayed on a computer screen. The text branches and allows the reader to pick and choose blocks of text by interacting with a computer.

Advantages of hypertext in FL reading comprehension

According to Santoro (1994), the World Wide Web uses a hypertext information retrieval system. There are hypermedia links to other documents on the Internet. Selecting these links results in the documents being downloaded and displayed on the screen. Automatic cross-referencing maintains the student’s interest in reading comprehension.

Fowler (1994) states that hypertext involves multi-linear reading. Students need to make critical choices about which passage of text or point of view they will access next. Heim (1993) says that hypertext encourages a literacy prompted by jumps of intuition and association. These constitute non-linear ways of reading. Nyce and Kahn (1991) conclude that to read hypertext, students need to learn to navigate and explore the text (rather than follow a single path). They must become ‘active information explorers’.

Another advantage of hypertextuality is that it includes a greater percentage of non-verbal information than does traditional printed reading material (Landow, 1992). This allows students to gain a better comprehension of the text. Nelson notes that; hypertext allows the student to be in control. Text is not artificially processed into a presentational sequence. Self-study is possible, as the student is no longer dependent on the teacher for his/her learning. Finally, hypertext can be used in the short-term to revise for tests and exams and in the long-term to reinforce skills and concepts.

Of course to be able to access hypertext information, students need to be familiar with not only hypertext but also computers.

ii. Traditional printed reading material

“...Reading has been called the most thoroughly studied and least understood process in education today” (Schulz, 1983: 127).

Barnet (1989) was the first researcher to study the important role of the reader.

Some definitions of reading comprehension

- **Allen and Corder (1979) (cited in Grabe 1997, p.7):** the activity of reconstructing a reasonable spoken message from written symbols to a form of language, which the person can understand.
- **Widdowson (1985):** an interaction between writer and reader mediated through a text. Reading involves an interpretative process like all communication.

There has been a shift from a pure skill approach to a process approach that is similar to the comprehension research carried out in cognitive psychology.

Carel, Devine and Esleey (1988), Lee and, Grabe (1997). Reading is not just a decoding process as Goodman (1967) suggests. It involves the integration of bottom-up processing which is text driven and top-bottom processing which is concept driven.

Perfetti (1984), Word recognition plays a key role. Other component skills occur at the same time as words are recognised.

Importance of reading comprehension

- **Rivers (1981):** publications are needed for English learners to have contact with native speakers. This is especially important in cases where direct contact with English native speakers is not possible. An understanding of text also allows people to keep in touch with the wider world.

- **Farhady, Jafarpour and Birjandi (1994):** reading comprehension is the most important skill for most language learners, especially for EFL learners.

- **Chastain (1998):** language students need a lot of comprehensible input and reading material is the most available source.

- **Carrel (1988)**: reading is essential as it is used extensively for academic purposes. Reading is the main reason why students learn languages.
- **Cohen (1986)**: students need to read specialised English language materials as part of university work.

METHODOLOGY

Subjects

In order to conduct this study, 40 students were randomly selected from a population of 300 students from Zanjan University English Language Department. They were randomly divided into two groups: (1) experimental group and (2) a control group. The experimental group received EFL reading instruction through the Internet, and the control group received EFL reading instruction without the Internet. All the students taking part in this study were undergraduates who were enrolled in summer courses for a period of ten weeks, two 90-minute sessions every week.

It should be noted that in the control group, 13 subjects were male and 7 female, and in the experimental group 11 subjects were male and 9 female. The researcher taught both groups, and attempts were made to control for the following factors.

- **Education**: All of the participants were in their fourth year of college education. They had already accumulated at least 100 credits.

- Native language: The native language of most of the students was Farsi (Persian).
- Duration: Equal time was spent teaching both groups (ten weeks, two 90-minute sessions per week)

The Hypotheses

1. There is a significant difference in the students' attitudes towards EFL reading comprehension when they are taught by Internet techniques as opposed to those taught by non-Internet techniques.
2. There is a significant difference in the achievement scores of the students taught by Internet techniques as opposed to those taught by non-Internet techniques.

Research Questions

1. Will the students improve their attitudes towards EFL reading comprehension after being taught by the Internet?
2. Will the Internet-assisted teaching of reading comprehension yield significantly better results than traditional, non-Internet techniques in terms of the students' proficiency in EFL and academic achievement?
3. Will the evaluation of the usefulness of the Internet in the EFL reading classes help EFL teachers and students in the future?

In an attempt to answer these questions researchers Neu and Scarcella (1987) made the following claims:

- The reading comprehension of the students can be improved by using the Internet and the computer.
- Affective factors, such as attitudes toward reading, can be improved.
- Willingness to read is higher when the Internet is used.

As the use of the Internet in EFL teaching becomes generalized, the focus of research in this area changes away from comparison of achievement and attitudes between computing environments towards the description and analysis of the ways in which the technology can support reading development.

Instrumentation

- In this study the following instruments were used:
- Internet tools and resources were used for reading.
- Microsoft Word was used for writing précis.
- The TOEFL reading comprehension proficiency test was administered as a pre-test to both experimental and control groups. This test consisted of 40 questions on reading comprehension. This was to ensure that the two groups were homogeneous
- A Likert Attitude Scale based on a 4-point scale (from 1=Agree Strongly to 4=Disagree Strongly) was constructed and administered to both experimental and control groups twice, before instruction started and after instruction. This was to measure the students' attitudes towards EFL reading comprehension classes.

- Two post-tests were administered, both consisting of 40 questions on reading comprehension. One was based on the material given to the students to be covered in both groups. The second post-test was a TOEFL reading comprehension proficiency test similar to the one used as a pre-test.
- A questionnaire containing 46 items was given to the subjects in the experimental group who had to agree or disagree with each statement. A 4-point scale was used (from 1=Agree Strongly to 4=Disagree Strongly). The questionnaire was administered at the end of the students' ten-week instruction by the Internet. This was to evaluate the usefulness of the Internet in EFL reading classes.

Materials

The reading materials were chosen as a result of Internet searches and URL addresses received by sending email messages to teachers of ESL around the world, at the following email addresses.

- TESL-L@cunyvm.cuny.edu
- NETEACH-L@raven.cc.ukans.edu
- TESLCA-L@cunyvm.cuny.edu

The materials to be used were the same for both groups, but the groups were treated with two different ways. Readings were selected from three levels: easy, intermediate, and advanced. The Internet materials were chosen by considering the following factors:

- **Step O, Pre-evaluation**

Before even starting the search, some time was spent pre-evaluating objectives and setting goals in order to determine what was to be investigated. Did the material include facts, opinions, logical arguments, statistics, or eyewitness accounts? Then it was determined why this information was necessary. Answering these questions in advance and knowing what she should look for helped the researcher create her own set of criteria by which she could screen the sources and evaluate what she found.

- **Using common sense**

Intuition and experience were used to think about what kinds of sources were credible. Furthermore, since not all materials on the Internet cannot be relied on for impartial treatment of a topic, the author's purpose for writing the material was considered.

- **Anonymous Tips**

Questionable sources are less likely to contain personal information about the author. Therefore, the sources were searched according to the following criteria:

- The author's name
- The author's credentials and position
- The author's organizational support, and
- The author's contact information

. CARS Evaluation Criteria

Then the CARS (Credibility, Accuracy, Reasonableness, and Support) test was used for source evaluation:

➤ **Credibility:** Is the source believable?

Has the article undergone quality control?

Is the article presented in an even tone?

Is the article well written?

➤ **Accuracy:** Is the information correct—up-to-date, factual, detailed, exact, and comprehensive?

Is the information current?

What is the purpose of the article?

➤ **Reasonableness:** Does the information presented in the material make sense? Is it fair?

Does it follow the sense of how the world works?

Is the argument consistent?

➤ **Support:** Cited sources strengthen the credibility of information.

Considering all these factors, 18 reading passages were chosen to be covered during teaching sessions. Care was also taken to select enjoyable and interesting passages.

Procedure

To conduct this study, first each group was introduced to the study by being given the same orientation to the procedures to be used. The study

lasted ten weeks covering twenty 90-minute classes. In the first session the Attitude survey was distributed to the students in both groups. Although the subjects were randomly chosen and randomly assigned to the experimental and control groups to ensure homogeneity between the two groups, the TOEFL reading comprehension proficiency test consisting of forty questions was administered to all participants before the actual instruction began. The following table shows the means for both the control and experimental group.

Group	Mean
Control group	18.2
Experimental group	17.80

Then the teaching started at the Computer Center in the Institute for Advanced Studies in Basic Sciences (IASBS). Students designated as the experimental group were given general instruction on how to operate the computers and work with the Internet and were advised to spend some more time to become familiar with them. The researcher was present to respond to the students' questions and monitor their progress. This took several days because it was most important that the preparedness of the learners in using the Internet be assessed.

Internet-based teaching of the assigned reading materials

The Computer Center of IASBS was used for teaching. Online reading materials were used: (<http://user.gru.net/Richardx/index.html>)

In this approach, three kinds of activities were used.

➤ **Pre-reading activities:**

- Brief information was given about URL addresses, the materials, and the authors.
- Some colored pictures were given through the Internet to activate the students' background knowledge about the topic. For example, in one of the lessons entitled Leonardo's workshop, one of his famous paintings was on display. This was used to make the students think.
- Some of the vocabulary was presented with pictures or games, for example, the Watershed Game for "Live Bell" in the lesson entitled "Live Bell." This was to make the meanings of the words clear.
- Explanations were given about very difficult words before the students encountered them the reading passage, for example, "prairie" or "beating the odds".

➤ **While Reading Activities:**

- The students were asked to skim through the reading passage for a few minutes.
- Using a speaker attached to one of the computer, the students listened to the passage read by a native speaker.

- The students checked the meanings of new words by mouse-clicking on the hypertexted word, which was linked to the correct definition.
- The students were asked to read the passage aloud sentence by sentence.
- The students collaborated on understanding the meaning of the passage.
- If necessary, the researcher gave explanations about the meaning of the passage.
- **Post reading activities:**
- Each lesson was followed by different kinds of post-reading activities:
- Multiple choice comprehension questions
- A multiple-choice quiz
- Editor's notes, which the students were supposed to read and then create on their own later (for example: Jackie is now filming a film titled "Gorgeous." It is.....)
- Read more about ... (for example, Jackie in Mini-world issue 64).
- Choose the correct answers.
- Précis writing.
- This is a summary of the story. Complete the summary by typing the correct words into the gaps.

- Gap fill exercises, such as “Nasreddinfrom his neighbor....”
- Recreate the story sentence by sentence. Choose the correct sentences from A, B, or C.
- Really easy questions: Choose the answers you think are correct.
- Email. Using the new words send an email to another student in the class.
- Internet relay chat. Discuss about the lesson via IRC.

In this approach there was no need for the researcher to correct the answers. The answers were automatically corrected, and different feedback was given for correct and incorrect answers. If the answers were correct, the web page automatically displayed phrases such as “all correct,” “well done,” “very good,” or “excellent,” “Your grade is 100.” If the answer was wrong, phrases such as “failed,” “Try again,” or “Redo” were displayed on the web page.

The activities involving Internet-based teaching were very exciting since the students had to follow the instructions and directions given, such as “log in,” “go,” “click,” “continue,” “sign in,” “sign out,” “next question,” “let's go,” “log out,” “log in to start the game,” “type in your name,” “correct quiz,” or “redo quiz,” etc. The students were encouraged to do the followings when they encountered the above notes:

- ❖ to think about what they saw on the web page.
- ❖ to learn technological skills.
- ❖ to learn research skills.

- ❖ to pursue and learn a subject at a deeper level because of the hands-on approach used.
- ❖ to have fun in class.
- ❖ to monitor their own work.
- ❖ to think creatively.
- ❖ to exercise critical thinking.
- ❖ to exercise independent thinking.
- ❖ to work cooperatively.
- ❖ to be less dependent on the teacher.

In the control the same procedure was used but in traditional settings. It must be noted that the most important difference between the two ways of teaching was that the control group used linear text in the classroom, whereas the experimental group not only used the non-linear hypertext but email and Internet relay chat . These Internet tools really made the teaching and learning enjoyable and creative.

Data collection procedures

Data collection started with a pretest and attitude survey, which identified the reading ability and attitude of the participants. All of the students went through ten weeks of training. At the end of the course, all participants were given attitude survey and they also took the post-tests as final exams. To collect the relevant data, statistical procedures were used to compute means and SDs. And one tail t test was carried out to check for the differences between the means at 0.5 level of significant. Finally percentages were computed or the questionnaire.

DATA ANALYSIS AND FINDINGS

There was no significant difference in the attitude and TOEFL tests that were given to both groups at the beginning of the course. Thus obtained t is less than the critical t . The interpretation is that the two groups had similar range of attitude and abilities before the treatment was used. (1&2)

Table 1

Variable	Number Of Subjects	Mean From 40	SD
PRE – TEST, TOEFL			
Experimental	20	17.80	5.422
Control	20	18.2	5.11
Mean Difference = 0.35			
To= .141		Tc=1.69	

Table 2

Variable	Number Of Subjects	Mean From 40	SD
ATTITUDE 1			
Experimental	20	16.8	5.96
Control	20	17.05	5.22
Mean Difference = -.25			
To=0.745		Tc=1.69	

The difference in the attitude, as well as TOEFL and achievement test for both groups at the end of the course were significantly different.

Observed t of all t-tests were higher than the critical t. These results suggested that the treatment given to the experimental group had affected the students ' attitude and performance in EFL reading comprehension. This difference indicated a grater interest and ability in EFL reading. (Tables 3, 4 & 5)

Table 3

Variable	Number Of Subjects	Mean From 40	SD
ATTITUDE 2			
Experimental	20	29	8.49
Control	20	24	8.22
Mean Difference = 5			

To=2.11

Tc=1.69

Table 4

Variable	Number Of Subjects	Mean From 40	SD
POST ACHIEVEMENT TEST			
Experimental	20	34.15	5.56
Control	20	28.65	6.028
Mean Difference = 5.5			

To= 2.99

Tc=1.69

Table 5

Variable	Number Of Subjects	Mean From 40	SD
Post Test, TOEFL			
Experimental	20	23.1	2.09
Control	20	20.2	5.6
Mean Difference = 2.9			

$T_o = 2.33$

$T_c = 1.69$

As a result of the use of Internet tools, students in the experimental group were more prepared for their final exams and obtained better scores than the control groups. Therefore on the basis these data the hypotheses were proved.

In addition, the analysis of the results obtained from the questionnaire indicates the following: Fully 98% of the students believed that the Internet helped them to improve their reading ability and skill. 70% found that it was not difficult to learn to use the Internet for EFL reading. 90% of the student agreed that materials become more comprehensive by using the Internet. 89% of the students agreed that the Internet creates active learning and effective contact between students and teacher. 92% of the students agreed that the Internet helps them learn the subject matter on a deeper level, makes class fun, encourages monitoring, helps them think creatively and critically, and also helps them practice independent thinking.

All the data above support the usefulness of the Internet in the EFL reading comprehension classroom and indicates that the application of the Internet in EFL reading classes not only helps EFL students but improves the students' attitudes toward reading and leads to improved proficiency as well.

What teachers should do in EFL reading

Teachers need to gain technical competence to coach students how to use the net in EFL reading comprehension. This competence involves the installation and use of net programmers and materials. To solve technical problems quickly, teachers should set up technical/computing support.

Teachers should explain the basic and complex internet notions clearly in order to encourage learning and stimulate progressive skills development.

Teachers should be clear about the goals, objectives and assessment techniques of using the Internet so that the objectives of the overall language course can be understood. This would involve careful preparation but would make the course more enjoyable and stimulating.

Teachers should maintain student interest by using existing techniques and also inventing new ways of encouraging and motivating students to take responsibility for their role as active learner.

Teachers should establish and maintain professional contact with other "e-teachers" in their specific discipline. This would ensure a continuous flow of information.

Finally, teachers should adopt a 'learning facilitator' role rather than a traditionally authoritarian teacher role.

Conclusion

Much remains to be done in further research on the effectiveness of the Internet in the educational field. The analysis and comparison of the results on the post-tests given to the subjects revealed that the experimental group taught by Internet not only scored better on their comprehension tests than did those in the control group but there was a great change in their attitude towards reading comprehension. It was thus concluded that the main difference in the students' scores and attitude was due to the use of the Internet techniques. Therefore, it can be argued that Internet based teaching of reading comprehension can be extremely powerful educational tool. The analysis of the results of the questionnaire administered to the experimental group also strengthened the usefulness of the Internet in EFL classroom.

It still remains to be seen how the net will influence EFL instruction in the future. Nevertheless, it seems reasonable to claim that the key to success in the new millennium will be information. A further integration of networked computers into society is likely to take place. Global communication will become increasingly important and knowledge of English, being a world language, will be paramount. Therefore, students will have to acquire both computer and language skills to be successful

in the information age and, as shown in this thesis, the integration of the Internet in the EFL classroom is a step in the right direction.

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