ENHANCING STUDENTS' MOTIVATION IN LEARNING ENGLISH GRAMMAR THROUGH A COMPUTER-SUPPORTED LEARNING CLASSROOM MANAGEMENT

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Abstract: This research is to examine the students' motivational factors and attitude towards the learning of English grammar in a Computer-supported Learning System. Twenty-nine students were taught with a student-centered approach and three grammar learning web sites were used frequently for classroom and individual English grammar practice, whereas another twenty-nine were taught with the traditional teacher-centered approach. Both groups were given grammar correction and explanation tests before and after the study. After comparing the results of the pre-test and post-test with those of the control group, it was found that the experimental group excelled over the control group in both grammar correction and grammar explanation. It proved that students' implicit and explicit knowledge on English grammar was greatly improved by the computer-supported teaching methods and environment. Further interviews with the students also revealed that the new pedagogical practice had provided many positive motivational factors in supporting students' learning process.

Keywords: motivation, grammar, computer-supported classroom.

INTRODUCTION

Learning is always a concious attempt to possess a particular knowledge or skill in various areas. It covers several aspects supporting the proscess of gaining the knowledge such as a specific attention, better cognition, and fine performance. Learners may apply

those three supporting components differently due to different environment, strategy, goal and even psychological condition.

Such condition also happens in learning a new language, like English. Different students may apply different strategy, technique, and goal since they have different personal reasons and problems based on what the previous experience they have. It is in line with Goodwin's (1976) statement that language acquisition is the growth of the mental organ of language triggered by certain language experiences.

However, above all, motivation is the basic thing to put as the main consideration because all the supporting aspects previously mentioned will be meaningless without it. Motivation is the trigger for every learner to learn something and to reach the expected outcomes. Hence, it plays a very important role and may have effects on the attention, cognition, and performance degree. Motivation involves caring about a task or wanting a successful task outcome—and that once individuals care about the task they will display the cognitive processes (and hence the intellectual performance) of which they are capable. In other words, motivation is a quantity that people have in varying degrees and, if they have enough of it, their intellectual performance will fully reflect their cognitive abilities (Dai & Robert, 2004).

Before receiving university education, Indonesian students mainly learn English grammar by traditional practices and drills. Although some suggestions on grammar teaching approaches, such as communicative approach, functional grammar have been introduced, limited progress has been made. Students still commit a lot of grammatical mistakes and while students finish their secondary education, many of their grammatical mistakes have been 'fossilized' and more powerful innovative approach in the teaching of English grammar is required in order to break this stringent barrier.

Learning English merely cannot be separated from grammar. Grammar, for most students, is the hardest subject to deal with. It is

constructed by various sophisticated rules related to sentence production. It can also be used as the tool to modify and analize sentence constructions. No wonder why some students feel overburdened when learning English grammar. Some students, on the contrary, thinks that grammar is quite challenging. That is why they cannot wait to have a classroom discussion on English grammar, even they make a small group specializing talking about grammar.

Nowadays, students do not have to feel bored in learning English grammar because the advances in technology. The vast growing use of internet gives advantages to the students in particular to have new different ways of learning. They can find online grammar tutorials easily and make use of it. They can adjust their grammar mastery level with tutorial or explanation provided. Most students feel motivated this way, some of them still prefer classroom explanation in which they can actively interact if problems occur.

Depart from those mentioned facts, this research is to examine motivational factors and attitude of EFL learners of an Indonesian Islamic college towards the learning of English grammar in a Computer-Supported Learning System. It tries to tackle the following questions:

1. Is there a significant difference in students' achievement in English grammar between students taught by the computer-mediated approach and the students taught by the traditional approach?
2. Does the use of the computer-mediated approach affect students' motivation and attitude toward the learning of English grammar?
3. What improvements can be made on this approach to facilitate better learning of English grammar?

LITERATURE REVIEW

Traditional Approach on Teaching English Grammar to L2 Learners

A very common approach adopted by teachers would be the explicit introduction of grammatical rules in the classroom, which is then reinforced by different kinds of drills and practices. Grammatical

knowledge is mainly learnt by trial and error and students may suffer from a lot of frustration which deters positive learning. Researchers have also cast doubts on whether this approach can really help learners to acquire implicit knowledge (Richards & Rogers, 1986). Due to these reasons, grammar teaching pedagogies of the 1980s and 1990s continued to treat explicit grammar teaching with some caution.

Doughty (1991) investigated the acquisition of English relative clauses under rule-governed instruction and under meaning-oriented instruction, and whether acquisition of harder structures would facilitate acquisition of easier structures. She found that both groups improved significantly against a control group with no advantage for rule-oriented instruction. However, instruction in marked relativization did appear to generalize to the acquisition of less marked aspects of the form, suggesting some advantage for teaching focus on form.

Researches measuring the impact of instruction on both explicit grammatical knowledge and production have produced conflicting findings. Frantzen (1995) investigated whether explicit grammar teaching and corrective feedback improved grammatical knowledge and accuracy and fluency of writing, as measured by a discrete-point grammar test and an essay before and after the intervention. Both treatment and comparison groups made significant progress in both areas. However, the experimental group outperformed the comparison group on the grammar test only.

The Use of Computer in Language Learning

Research has been ongoing for decades exploring the use of Computer-Assisted Language Learning (CALL) in different situations. Many researchers believe that it carries a big potential for the future development of second language teaching and learning. For a long time, basic drill and software programs have dominated in the market of CALL.

Although some research findings have shown that the use of CALL may not yield positive effects due to various reasons like lacking of technical knowledge or other adaptation problems encountered by second language learners (Smith & Woody, 2000; Nutta et al., 2002), most of the research findings have shown that the positive effects always outweigh the negative effects and positive attitude has always been resulted. For instance, Klassen & Milton (1999) evaluated the effectiveness of a multi-media based English learning program at a university. Results showed that positive attitudinal changes for the multimedia enhanced mode of learning. Ayres (2002) also examined students' attitudes towards the use of CALL and reported that the subjects' attitudes towards English learning increased to a very large extent. The research also revealed that there was a link between pupils' attitudes and their level of computer literacy, language level and age. He examined students' attitudes towards the use of CALL and their perceived view of its relevancy to their course of study. Many positive findings were documented. Similarly, Holmes (1998) surveyed 100 Japanese first year university students in order to investigate the influence of CALL in their English language classroom and on language education in general. It was found that most students were in favor of the use of CALL in their classrooms.

Table 1 CARE Evaluation Model

IQ Category	**IQ Dimensions**
Content IQ	Accuracy, Coherence, Objectivity, Source of Authority, Timeliness, Completeness, Scope, Uniqueness, Links,
Integration with other materials	
Accessibility IQ	Connectivity, Security, Easy to find, Cost
Representation IQ	Quality of Expression, Ease of Navigation,
Interactivity, Use of Multimedia	
Education IQ	Levels, Motivation, Creativity, Self-regulation

Based on the categories and dimensions of Information Quality (IQ) developed by Huang, Lee and Wang (1999), Yuen and So (1999) developed The CARE Evaluation Model for assessing Electronic Web Resources (EWR). The term CARE is an acronym which stands for Contents, Accessibility, Representation, and Education. They are the four IQ categories and under each category, several IQ dimensions have been included for assessing whether a certain kind of web resources possesses satisfactorily that function.

Other Criteria Relevant to Evaluating English Grammar Learning EWR

The CARE evaluation model is a very powerful and comprehensive tool for evaluating many kinds of EWR. However, it is generic in nature and may not be tailored-made enough for measuring, for example, whether a particular web site is useful enough for English grammar learning. Hence, according to the researcher, some of the IQ dimensions have to be modified in order to suit the specific evaluation requirements. The following criteria are listed for consideration:

1. Organization of Content

It is always questionable whether the grammar content should mirror the organization of a grammar textbook. However, it always happens that the result would not be satisfactory since the user may not be able to see the full content page on the screen at one time, let alone flipping back and forward between pages. Therefore, information presented in an English grammar learning web site should not be as linear as the organization of a grammar textbook. The dimension of depth should be considered since learners may always want to learn more about grammatical rules such as the uses of passive in formal writing. Hence, a good organization of grammar material should include operational instructions on the exercise, preferably accompanied by numerous animated examples, a reference note, linear information on where they are up to in the exercise,

options to check and erase the answer. Finally, an index card would be available at all screens so that users can get instant access to other strata of activity.

2. Display of Grammar Drills

To maximize learner's attention, one grammatical task should be displayed once at a time. For proofreading task, short paragraphs are preferred more than long paragraphs, and small number of grammatical rules should be tested at a time. This approach is in compliance with Hemard & Cushion's (2006) idea on date-related functionalities which stresses "the importance of date selection, retrieval, updating, presentation, and interaction" (p.113). It is desirable that a larger font size should be used, which aims to improve legibility and reduce eye strain. In addition, the users should be able to erase and replace any incorrect answer without messing up the page. They should be able to see how an answer looks without being committed to it. Finally, correct answers should be displayed at appropriate times. Late displays of correct answers would reinforce bad habits while early displays of correct answers would result in embarrassment.

3. Feedback, Scoring and Record-keeping

It is often considered that feedback provided by a computer is often inferior to the best feedback provided by a competent language teacher. However, the least happy memories also appear when a language teacher point out a student's grammatical mistakes before his or her classmates. In a mixed-ability class, it also requires large investment of a teacher's time in giving individual feedback. Hence, the use of computers in providing feedback certainly has a role to play. Regarding providing feedback, computers are very interactive where textbooks are not. They also excel over a teacher's feedback in terms of patience, speed, detail, impartiality, and confidentiality.

Regarding scoring and record-keeping, a variety of functions can be achieved. They include scoring the progress and final results; indicating how many questions have been attempted, how many unfinished, and the scores should be stored for the learners to check

their progress. Most importantly, the correction process may not require teacher involvement, and students' results can be put in private files accessible by the teacher and the learner, but not by the other classmates.

4. Focused Tutorial Assistance

For complex grammatical rules like the use of tenses, relative clauses, modifiers and subordinating conjunctions, they cannot be learnt merely by grammar drills. In each case, some tutorial assistance should be provided. It is believed that a large range of examples should be provided to allow learners to explore variants of the grammar principles and different levels of complexity.

5. Graphics and Animation

The use of graphics and animation can always add fun and stimulation to the learners. Examples like cue cards, posters, video clips, line drawings and animated characters can provide a lot of added colors to the experience of learning. In addition, when images are paired with words, such as in the learning of proper and common nouns, memories of the learners can be enhanced.

METHOD

Research Design

The research design of this study is Sequential Explanatory Design. According to Creswell et al. (2003), this design "is characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. Priority is typically given to the quantitative data, and the two methods are integrated during the interpretation phase of the study."

Subjects of the Study

Subjects in this research were 58 fourth-semester English Department students of an Indonesian Islamic college taking English Grammar 3. They were chosen since they have enough knowledge and experience in English Grammar classroom. It will be easy for

them to adjust the level of tutorial, explanation as well as the quizzes provided by the webs. The subjects were divided into an experimental group (29 students) and a control group (29 students). Coincidently, they shared the same number and gender distribution. All students had the same learning situations such as the size of classrooms, the same course materials and coursework to be finished, as well as the same lecturer.

Learning Materials

Grammar rules and drills were the focus of this study. The syllabus covered in the study is the same syllabus used by the English Department of the college. This material was available into two forms: (a) hard copy for the control group, and (b) electronic web resources for the experimental group. A range of grammar topics included: nouns and articles, pronouns, word forms, sentence structure, connectors, relative clauses, modals, passive voice and collocational grammar. Students, both in experimental and control group, had to write two pieces of 200-word essays and each of them had to do an individual presentation on a grammar topic. They were also advised to explore any online web-based dictionary.

Instruments

Pre-tests and post-tests

The structure of the pre-test was identical to the post-test. The test had to be finished in 30 minutes. Each test consisted of 10 ill-formed sentences covering each grammar topic taught in the course. Students had to correct each sentence and then give grammatical explanation using grammar terminology. The intention is to measure students' implicit and explicit knowledge on English grammar.

Student Questionnaire

A questionnaire is designed for each student of the experimental group. It consists of three parts. The first part covered questions on personal information. The second part covered questions on their

attitude, motivation and opinions on the use of web resources for learning English grammar, and also the use of a computer-mediated course management system for collaborative learning. The final part covered open-ended questions on both advantages and disadvantages of using web resources, and overall suggestions on the delivery of the course.

Semi-structured interview questions

Two sets of interview questions were prepared to interview individually 10 students from the experimental group. Questions covered the changing role of tutors and students, the teaching/learning difficulties, the effectiveness of EWR, the design of computer-mediated grammar drills and ways to improve the pedagogies.

Data Collection

First, the researcher evaluated three selected grammar learning web sites and incorporated them in the teaching syllabus. At the beginning of the first lesson, a pre-test was given to all students both the experimental group and the control group. After the pre-test, teachers should follow the teaching syllabus. The only difference was that the experimental group was taught by a computer-mediated approach whereas the control group was taught by a traditional approach. The whole teaching duration would last for 12 weeks (pre-test, mid-test, and post-test included) and in the final tutorial, all students had to finish the post-test and students of the experimental group had to complete the students' questionnaires. Finally, interviews were conducted on the 10 selected students from the experimental group immediately after the completion of the course.

Data Analysis

The analysis of students' performance was basically score-based and the analysis on students' questionnaires was totally

descriptive in nature. The researcher attempted to summarise and highlight significant findings in the presentation and sometimes logical inferences were drawn. Regarding data collected from the interviews and open-ended questions in Part III of the students' questionnaires, the researcher grouped, summarised and tabulated the findings, which were also accompanied by descriptive and objective explanation. Data gathered by this triangulation approach was in general quantitative and qualitative in nature.

FINDINGS AND DISCUSSION

Students' Achievement in English Grammar

The experimental group consisted of 29 students whereas the control group consisted of 29 students. Students' achievement in their pre-test and post-test can be compared to show their progress. The total score is 100 for each test, which is a sum of two separate scores: 50 scores on Grammar Correction + 50 scores on Grammar Explanation.

Table 1: Students' achievement in grammar correction

	Pre-test Mean	Post-test Mean	Difference	Percentage Increase
Control Group (N=29)	11.9	29.1	+17.2	145%
Experimental Group (N=29)	11.6	40.3	+28.7	247%

Table 2: Students' achievement in grammar explanation

	Pre-test Mean	Post-test Mean	Difference	Percentage Increase
Control Group (N=29)	5.6	22.5	+16.9	302%
Experimental Group (N=29)	5.5	30.6	+25.1	456%

Table 3: Students' achievement in the overall test

	Pre-test Mean	Post-test Mean	Difference	Percentage Increase
Control Group (N=29)	17.5	51.6	+34.1	195%
Experimental Group (N=29)	17.1	70.9	+53.8	315%

Students of the experimental group showed greater improvement in both grammar correction and grammar explanation, which manifested in their acquisition of more explicit grammar knowledge and implicit grammar knowledge. Many students were also able to use metalanguage in their grammar explanation. Most significantly, the results exhibited that there was 456% increase in the mean score in respect to the grammar explanation ability of students of the experimental group.This showed that the implicit grammar knowledgewas increased to a large extent when a computer-mediated approaching was used in teaching English grammar. This assumption was further reinforced by the findings from students' questionnaires collected.

Impact of Computer-Mediated Approach to Students' Motivation and Attitude

Positive Attitude toward the Use of EWR

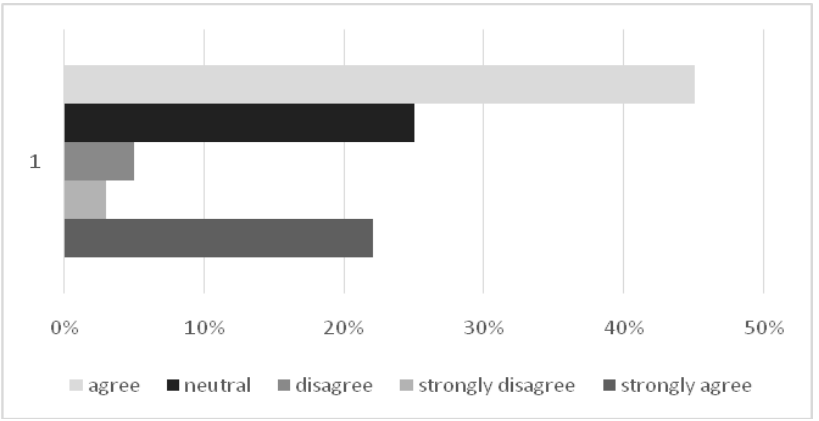

Figure 1: Using EWR to learn English grammar is a fascinating idea

From the above figure, it showed that 67% of students agreed that it would be a fascinating idea if EWR were used to learn English grammar. Also, 25% of students also expressed neutral opinion, implying that they partly agree with this idea.

Positive Motivation Resulted from the Use of EWR

A total of 21 (72%) students expressed that the online grammar games made them feel learning English grammar could be fun. Apart from denoting a positive attitude, this finding also implied that students' engagement in grammar learning activities was maintained by the joy and entertainment provided by the EWR. This was a very important factor in bringing students to get involved in the learning activities. Very often students would expect more interesting tasks posted on the web site and in this study, 12 students (40%) did not feel that the video clips, animation and graphics on the web sites could sufficiently stimulate their interest in learning English grammar.

Advantages Offered by the EWR

Another reason why students of the experimental group performed better in the post-test was that the EWR had supplied the learners with a lot of advantages. They are fast, effective, convenient provided that their scope was wide enough to cover the academic content and flexibility in respect to time and location was also provided. From the questionnaires collected, no students disagree that searching grammar rules on the web was a fast and effective means to gather information. In addition, 23 students (80%) expressed that the Net Dictionary was a powerful tool for them to search for word meanings and grammar explanation. This was also in compliance with the researcher's suggestion the availability of an online dictionary on the web interface was vital for the learning of English grammar.

Computer-mediated Course Management System: Students' Comments

A total of 22 students (76%) expressed that the online-grammar learning can facilitate their learning of English grammar effectively. There were 25 students (86%) felt that they could learn a lot from their

classmates when they shared resources and discussed English errors on the Discussion Board provided in the online-grammar learning learning. A total of 26 students (90%) welcomed the idea that their individual progress results were kept in a person file in the online-grammar learning learning. Regarding difficulties in adapting to the platform, a total of 21 students (72%) disagreed that they had difficulties, so it can be concluded that most of the students had no difficulties in using online resource.

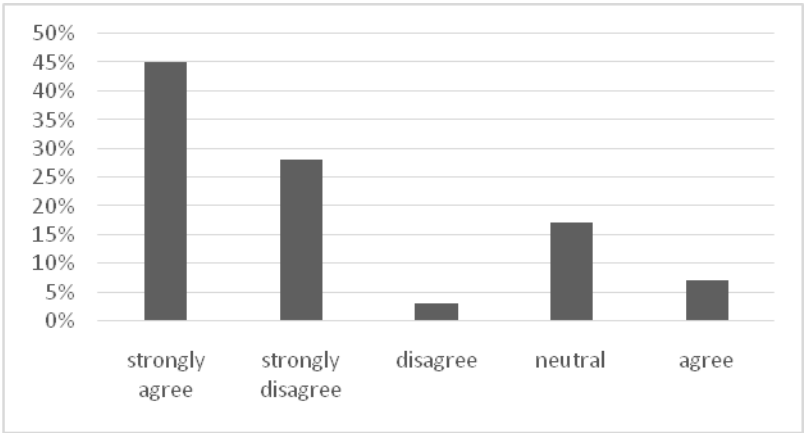

Figure 2: Difficulty in adapting to the use of online resource

Advantages and Disadvantages of Using EWR in Learning English Grammar as resulted from Open-ended Questionnaire

There were 4 open-ended questions in the students' questions. Results of the first two questions were combined together in the following table:

Table 4: Frequency of the advantages and disadvantages of using EWR in learning English grammar

	Advantages	**No. of Responses**
1)	Fast, efficient and convenient	22
2)	Learningis more interesting	15
3)	The approach fostersindependentlearning	13

	Advantages	No. of Responses
4)	Learners can get more knowledge of grammar	12
5)	It can save a lot of paper	7
6)	It can improve students'computer skills	7
7)	Activitiesare free of charge	5
8)	The learners can make more friends	2
9)	Students can help each other to learn	1
10)	Practices can help them pass the exam	1
11)	Studentscan understand their grammar weaknesses	1

Regarding the third open-ended question on which parts of the online-grammar learning learning can be further improved, 11 students expressed that the Discussion Board should be improved and more graphic tools and grammar and spelling checking tools should be included. A total of 11 students also expressed that they encountered difficulties in copying and importing images and very often it took more than 1 minute to complete the task.

Regarding the final questions, students were free to express their suggestions on how to improve the delivery of the grammar course. Again, their views were expressed by using a table (see below).

Table 5: Frequency of suggestions on how to improve the delivery of the English grammar course

	Suggestions	No. of Responses
1)	More demonstration on how to use EWR	10
2)	More time can be given for doing practices	5
3)	More functions of the online-grammar learning learningcanalsobeused	5
4)	More web sites can be introduced	4
5)	The grammar topics can be easier	3
6)	Assessments should be reduced	3
7)	More funny grammar games can be played	3
8)	Tutors can be members of the online groups	2
9)	More instructions can bestated at the beginning	2
10)	More motivation	1
11)	Some online games can be played in group	1

Improvements on Learning of English Grammar Resulted from Computer-Mediated Approach

A total of 10 students were asked with 8 semi-structured questions and their views were summarised as follows:

Lecturers' Views

The lecturer had realized that his teacher roles had been changed from an instructor to a facilitator. He had to keep a keen eye on the responses of the students in order to make sure that they had no technical problems. He also felt that students were better motivated in the learning. He thought that it would due to some reasons: the approach was new to students, practices were not assessed, students could discuss with their friends online and some grammar games are interesting.

He enjoyed the computer-mediated approach and he was fascinated by the positive learning attitude of the students. She believed that the use of information technology was a trend in language education.

He believed that both EWR and the online-grammar learning learning had a lot of potentials. He felt that students enjoyed the grammar activities, especially those other than the online multiple choice questions, so more jumble exercises, gap fills, story-telling and matching grammar games could be selected for them.

He came into conclusion that it is a suggestion for any teachers to improve this computer-mediated approach: better teachers' training, more web sites could be used, more interaction could be promoted among students, more authentic teaching materials could be used, better timing, better grouping and so on.

Students' Views

Most of students interviewed (8 out of 10) felt that their learners' roles had been changed. One of the students said, '*I don't feel that I am a learner when I come to the tutorial. I am just a participant and*

sometimes I am just a member of a chat group.' This comment was very real as students' involvement was highly expected because that was positively conducive to their learning. The higher is the participation rate, the better are the learning outcomes. Nevertheless, one student expressed that she sometimes could not cope with the technical problems on the activity, for example, when she lost the signal to connect to the internet, she got lost sometimes and could not return to the original web page, so she felt frustrated when she needed to redo the activity again. She expressed that she was better motivated in the later tutorial when she did not encounter the same problem anymore.

Some students also expressed that the tutorials were sometimes too hasty and they suggested more time should be allowed for them to finish their activities. They also hoped that the tutors could give them more instructions or guidelines on how to use the EWR at the beginning of the course.

Three students also expressed that it would facilitate their memories if more explanation of English grammar rules were given to them once they made an grammatical mistake. Five students also expressed that the grammar drills could be easier because they were learning the grammar rules, not the meanings of vocabulary items. This comment should also be well attended because it was in compliance of grammar teaching pedagogies.

IMPLICATIONS

Evidence for Previous Researches

The findings from this study have become supporting evidence of previous researches, some of them were conducted by Klassen and Milton (1999), Smith and Woody (2002), Nutta et al. (2002) and Ayres (2002). Those researches have all shown that the use of information technology could result in positive attitudinal change on the language learners. Very often, the positive effects could always outweigh the positive effects to a big extent and learners could participate more actively in their language learning.

Critical Attributes in English Grammar EWR

Drawing from the findings in this study, particularly questionnaire addressed to the students in experimental group, a list of critical attributes has been strongly recommended to be included in EWR. They are:

- Good backup for home study
- The work is set out for learners
- Work is individual but guided
- Much more practice than in a set text
- It encourages, insists on accuracy
- Fun must be involved
- Good graphics, animation, audio and video
- Students can make mistakes anonymously
- Grammar drills should suit a learner's need, pace and time
- Students have to learn a pattern
- It shows a learner's grammar weaknesses
- Work has to be structured carefully
- Students are free to do the practices they want
- A great variety of online grammar learning games
- A large data bas of grammar questions, varied according to levels
- User-friendly display of web page
- Availability of online dictionary at all times

Improving the Functions of the Online-Grammar Learning Learning

It is a good idea if language teachers and students can be aware of the functions of theonline-grammar learning learning. One possible reason is to compare them into 5 main types of functionalities suggested by Colpaert. See the below figure:

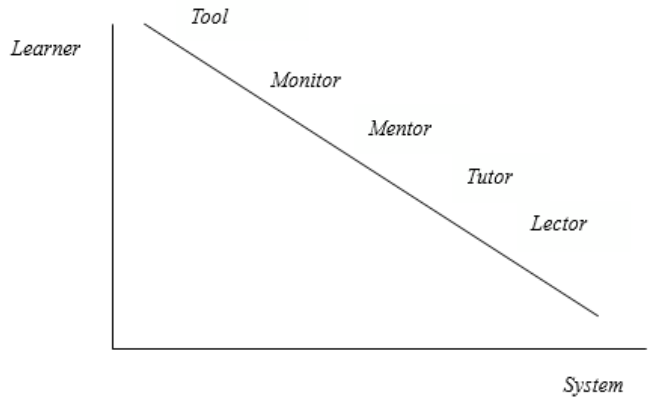

Figure 3: Classification of functionalities suggested by Colpaert (2004, pp.85-87)

According to Colpaert, *Tool* functions are simple commands to be executed by the system when asked by the user or the application itself (printing content of files, sending and receiving updates or corrections, displaying authentic. *Monitor* functions give advice on demand. For example, they check spelling and grammar, and provide translation, pronunciation, various hints, feedbacks and scores, and reports. The *mentor* functions follow up the learning process without the user's request or even awareness. The *tutor* functions organize the learning process in a specific way. This functionality type is quite clear in cases of intelligent tutoring, adaptive language testing and remediation. Finally, the *lector* functionality consists of conventional one-way interaction, such as a recorded lesson, a course on hyperlink web sites. It can be observed that the online-grammar learning learning has the potential to carry out the Monitor and Mentor functions and in the present study, the online-grammar learning learning has already carried out the Tutor function which is achieved by the course designer, the language tutors and even with the involvement of students, as in the case of forming learning communities on the Discussion Board. In short, the online-grammar learning learning has carried out the Tutor function, but it can be further improved or technically updated to perform other important functions such as the Mentor and Monitor functions.

Teacher Roles

Adhering to the constructivist methods, teachers should constantly observe student activities, with an eye for the individual student who is struggling or for the group that is stuck or engaged in dysfunctional processes. Another important teacher role is monitoring the discussion. Monitoring fulfills several purposes. The first, and perhaps the most important, is to ensure that the discussion remains focused. When students bring in irrelevant points, the teacher needs to point that out to the forum or at least communicate privately with the student. The student should also guide against flaming, where students ridicule each other's comments. Finally, the last important reason is to collect data for assessing the quality of discussion.

Apart from attending formal computer training courses, the Internet also offers a vehicle to teachers for connecting with others and accessing information, it provides a means for teachers to continue their professional development. Teachers can become part of the learning communities. Accessing experts, materials, and ideas to use for teaching and learning, staying current on events, issues, and trends in education and technology, and supporting each other as friends and professionals are all facilitated with Internet resources. Teachers can learn information not just by accessing information, but through actively engaging with it, transforming, analyzing, evaluating, collaborating, with an ultimate aim to maximize learning experience.

CONCLUSION

Bringing together the ideas, findings, discussions and implications stated in this study, it is obvious that the use of EWR and the computer-mediated management system has a great impact on university students' achievement, attitude and motivation in learning English grammar. Students were able to increase both their explicit

and implicit grammar knowledge by absorbing ideas presented by peers, their own learning experiences and the resources in the grammar learning web sites. The study alsosupported previous similar researches. Finally, critical attributes in EWR, the functionalities of the online-grammar learning learning, the types of learning communities formed in the process, the possibility of introducing a Knowledge Forum, teacher roles and professional development are all contributing factors to the future improvement of a more innovative grammar teaching approach.

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