

The Effects of Formative Evaluation on Students' Achievement in English for Specific Purposes

(A Case Study of the Preparatory Year Students at Umm- Al-Qura University)

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Abstract

This research attempts to find out the impact of formative evaluation on Saudi male learners' achievement in medical English. The study also seeks to find out instructors' and students' views and attitudes towards formative assessment. The sample of the study involves 98 subjects chosen purposively from among the Preparatory Year students at Umm-Al-Qura University in Saudi Arabia. They were divided into two equal groups; one is intended to act as an experimental and the other is taken as a control group. The experimental group was taught their ESP material following the formative evaluation techniques whereas the control group was taught the same material in accordance with the summative assessment principles. The experimental group instructors were given intensive training courses in Saudi Arabia and abroad on how to use formative evaluation principles in classroom. In the last week of the experimental period which lasted for sixteen weeks, the two groups sat for the final exam which was intended for all pre-medical students in the Preparatory College. The grades of all students in the two groups in the final exam was compared. The experimental group students performance was found to be much higher than that of the control group. Students' and instructors' attitudes towards formative evaluation were generated through a questionnaire and a series of interviews. Advanced statistical analysis of the responses of the instructors and students has shown their positive attitudes towards this form of evaluation. The study concludes with some recommendations to enhance this type of assessment and to conduct further studies on female students learning different language skills for different purposes. Suggestions to improve formative evaluation practice were also given to make this form of assessment more motivating and more enticing.

Keywords: formative evaluation, summative assessment, feedback, scaffolding, attitudes towards learning

1. Introduction

Since the start of last century, English has gained special importance. It has widely been indorsed as a language of communication between different human societies. Currently, English is found to be the language most widely used in the fields of science and technology. It is adopted partially or fully as a medium of instruction at tertiary education in a number of advanced countries such as Russia, The People Republic of China, Korea and Japan (Hassan, 2014).

In Saudi Arabia, as it is the case in many other countries in the world today, English is used as a medium of teaching in colleges of medicine, engineering, technology, economics and commerce (Omar, 2014). But unfortunately, most of the Saudi students come to the university and their level of English is far below being satisfactory. In 2009, however, a Preparatory Year Program was initiated in most Saudi universities including Umm-Al-Qura University where this study has been conducted. The objective of the Preparatory Year Program is to fill the gap between the proficiency level of students after passing secondary school examination, and the level required at university level where English is used as a medium of instruction.

In the Preparatory Year Program mentioned above, the students are placed in different levels according to their scores in an English test designed by Oxford Specialists. *Oxford New Headway: Special Edition Modules* are usually taught to pre-medical students during the first semester of each academic year. In their second semester, however, these

students start their *English for Specific Purposes Program* (ESP). Students who intend to study engineering are commonly assigned a book entitled *English for Technology*; students of economics and administration take *English for Commerce* and students planning to study medicine take *Nursing 1 and Nursing 2* as part of their ESP program. All these books come within *Oxford English for Careers Series* that allows students in different streams to study materials relevant to their future specializations.

The students' progress in the Preparatory Year Program in the first and second semester is usually assessed by midterm and final exams. These exams are based on materials taught during the two semesters, and the examination questions are *Multiple Choice Questions (MCQs)*. The nature of such exams is summative by definition. Their ultimate objective is to measure learners' performance at the end the course.

Unfortunately, this type of examinations has many shortcomings, as it discourages deep learning and the backwash in such a system of assessment is usually negative (Baker, 2012). In fact, this form of evaluation does not differentiate between hard working students and passive learners. After the midterm, most of the students become rather disappointed. They find that the evaluation system is quite discouraging and de-motivating. However, what is worse about this type of assessment is that it comes at the end of the course when it is really too late to do anything to help the students who do not do well in their exams. The feedback of this type of assessment does not serve any purpose beyond telling who passes and who fails (Aslam, 2015).

Indeed, one may feel gravely disappointed when he/she discovers that more than a quarter of the Preparatory Year Students at this university fail their final exam every year and are hence, deprived the opportunity of college education. This situation has urged educators in this part of the world to think of assessment procedures that enhance the teaching and learning process in order to avoid such tragic results.

In this case, formative evaluation (FE) may be thought of as an appropriate alternative to overcome this problem. It is widely believed that this form of assessment helps learners to know early enough about their strengths and weaknesses (Atkins, Black, & Coffey, 2001). In formative evaluation, learning outcomes are enhanced by timely and accurate feedback that provides insight into the learning process (Ruiz-Primo, & Li, 2013). Furthermore, formative evaluation helps the instructor to collect data on the learners' progress and obtain information about their style of learning (Pophan, 2008). In the light of such information, the teacher can modify his/her teaching strategies and approaches or even his/her methods and adapt them to the specific needs of his /her students. Formative evaluation also provides essential information that helps in decision making, especially in the development and modification of curricula (Linn and Grolund, 2000).

Evaluation is traditionally viewed as a separate process from teaching and learning. This is manifested in the form of tests and exams that come at the end of the study course. In fact , for years, educators used to see evaluation as a means for measuring learning final outcomes which is commonly done via summative evaluation (Looney, 2011). However, now this view has changed radically, and educators have begun to widen their scope of assessment to cover all types of activities that improve learning (Rabinowitz, 2010). This study will investigate the impact of a non-traditional type of evaluation, as represented by formative evaluation on the performance of a group of Saudi students learning an ESP course in the Preparatory College at Umm-Al-Qura University, K.S.A. The findings of this study can be used to enhance the process of modernizing the educational practice that stands as one of the main objectives of the Kingdom's 2030 Vision.

1.1 Need for the Study

In Saudi Arabia, English is widely endorsed as a language of teaching in most technical and scientific colleges. This situation has created a demand among Saudi students for this language. However, to help these students to do well in this language, instructors are required to look for the most effective methods and techniques to teach this language and to identify the most effective approaches to evaluate students' performance. Previous studies have shown that formative evaluation may have a potentiality to enhance students' academic achievement in general and their performance in English in particular (Black & William, 1998).

Indeed, formative evaluation determines the instructional strategies to be used in a certain classroom setting and allows instructors to get essential feedback on their teaching practice. This feedback has an important role in outlining the way learning material is presented and learned.

Furthermore, this study is expected to help in finding ways and means to support the performance of low achievers in ESP classes, diagnose their learning difficulties earlier, and adopt some effective teaching-learning strategies to treat these problems before it is too late.

1.2 Research Questions

This research is launched to answer three main questions:

1. To what extent does formative evaluation affect ESP learners' achievement?
2. What are the attitudes of the students and their teachers towards formative evaluation?
3. What is the instructors' perception of formative evaluations?

2. Review of Literature

2.1 Definition of Formative Evaluation

Formative evaluation is an assessment technique endorsed by both teachers and their students during instruction to generate feedback that can be manipulated to adjust teaching and learning to the students' ability levels and to assist them to achieve previously set learning objectives (Sadler, 1989). Pophan (2008) sees formative evaluation as a process that provides data about students' learning position.

Actually, formative evaluation involves techniques that can be adopted to rectify learning problems while teaching and learning are taking place. Formative evaluation usually comes in contrast with summative evaluation. However, formative assessment differs from summative evaluation in that the latter is mainly concerned with summarizing the achievement status of students to decide who passes and who does not pass (Sadler, 1989).

2.2 Feedback in Formative Evaluation

Feedback is defined as information about something one has done or made which tells a person how good or successful it is (Oxford Word Power, 2006). In his famous research on formative evaluation, Sadler (1989) describes feedback as the most essential element in formative assessment. According to Heritage, Walique & Linquanti, (2013), the instructor can get feedback from formative assessment process while learning is going on, and manipulate this information to adjust his teaching method, and to provide guidance to the students on how they can promote and improve their learning process. In this way, the direct provision of feedback is based upon the evidence collected during the teaching-learning procedures.

To handle feedback issue through marking, teachers are advised to fully acquaint themselves with current research findings. These findings assure that the giving of marks can have a negative influence on the students' performance (McDaniel. & McDermott, 2013). Some researchers claim that students generally overlook comments when the teacher gives grades (Heritage, 2013).

2.3 Formative Evaluation and the Teacher

Teachers can improve their students' learning outcomes if they act on clear information during their course of instruction. Research results reveal that some of the significant achievement gains are due to this feature of formative evaluation alone (Atkins, Black, & Coffey, 2001). It is known that making informed decision, responding to students' needs, and proper questioning strategies are among the most useful and fruitful actions that teachers can use when practicing formative evaluation.

2.4 Formative Evaluation and the Student

In their wide range analysis of research on formative evaluation which covers hundreds of studies from all over the globe, Black and William (1998) conclude that "*whatever the procedures by which the assessment message is generated, it would be a mistake to regard the student as a passive recipient of a call to action*" (p.21).

Sadler (1989) suggests that formative evaluation success in improving academic performance is due to its focus on enhancing students' ability to control the quality of their own performance while learning and during production. Indeed, the students' role in formative evaluation is a key one, but to play this role successfully and to achieve improvement, the student must endorse a view of quality identical or at least similar to that held by his/her instructor. However, to reach this level, the student must be able to continuously control and monitor the quality of what is being produced during learning and must have a set of alternative strategies that can be used to reach any given point (Black and William, 1998).

Practically, formative evaluation begins by the statement of the learning objectives and how they are likely to be realized. In this case, teachers design specific tasks to reveal students' level of attainment of these specific learning objectives, and design a framework to explain and analyze students' responses and provide feedback relevant to the

learning task –and may need to get involved in subsequent actions to check the interpretation and feedback effectiveness.

2.5 Formative Evaluation and Scaffolding

Scaffolding is a concept used to denote the assistance provided by instructor, parents or even peers that assists the learner to solve a problem, perform a certain task, or realize an objective that is beyond his/her current level or capacity. Wood, Bruner, and Ross (1977) see scaffolding as an action that includes specifying the students' interest in and adherence to the conditions of the learning task, reducing the number of steps needed to solve a problem by simplifying the task, focusing on certain features of the task, controlling frustration, and modeling an ideal version of the intended task. For instance, in the process of scaffolding language learning, a teacher might ask a series of questions designed to mold the students' thinking and generate responses that enable the learner to use already acquired linguistic knowledge in new situations. Furthermore, while scaffolding, the instructor may directly subject the students to the form of language that can back up both comprehension and interaction.

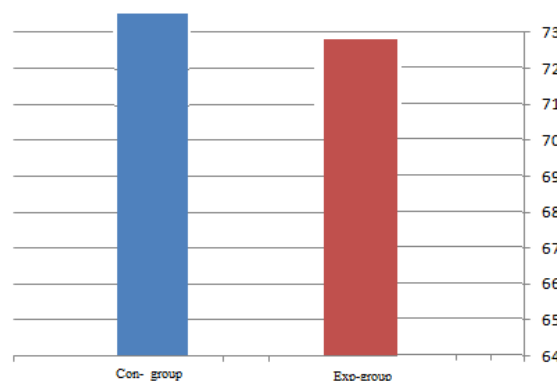
3. Methodology

3.1 Participants

The subjects of this study were drawn from the Preparatory Year students. They belonged to four classes (Classes 51 to 54) of the pre-medical students at Umm-Al-Qura University. Theoretically, the four groups had similar levels in English. They were all categorized as pre-intermediate in English as measured by Oxford Proficiency Test when they first joined the Preparatory Year in 2017-2018. Each of the four classes encompassed 24 or 25 students. Overall, there were 98 students in the study sample. All of these subjects were Saudis and their ages ranged between eighteen and nineteen years. They had studied English for at least eight years before they came to university. Students in Group 52 and 54 (49 students) were assigned randomly to represent the experimental group. The other two classes, i.e., students in (Classes 51 and 53) were then taken as the control group. To be sure that the two groups were of similar levels in English, a proficiency test was given to them before the beginning of the experiment. This test was an Online Test designed by Oxford. It has been used by the English Language Center for six years to classify the Preparatory Year students according to their level of proficiency and to place them in homogeneous classes. The result of this test is shown in the following table and graph:

Table 1. Mean, Median, Mode, Std. Deviation, Range, Minimum and Maximum mark for both Control group and Experimental group before the experiment

	Con-group	Exp-group
N	49	49
Mean	73.8	72.9
Median	70.9	69.8
Mode	73	72
Std. Deviation	3.4	3.2
Range	15	16
Minimum	64	63
Maximum	77	78



Graph 1. Reflects the level of the scores of the two groups before experiment

The above table and graph indicate that the control group and the experimental group have similar scores. The experimental group score is found to be (72.9) compared to (73.2) by the control group. This indicates that the two groups were at similar proficiency level in English at the pre-experimental stage.

3.2 The Setting and Instructors' Preparation

The study was conducted at the Preparatory Year building. It was done as part of the Social Sciences Research Center (SSRC) financed research activities in the second semester of 2017-18. During this semester, which normally lasts for 16 weeks, the Preparatory Year students begin their medical English (ESP) course. Some arrangements with the Preparatory Year administration were made to approve the assignment of four well-trained instructors to teach the experimental and the control group. These instructors were given an intensive training course on how to implement formative evaluation principles when teaching a medical English course. The training course started with an extended training program and workshops that lasted for four weeks. It was arranged by the Graduate College at the University of Khartoum in Sudan during the summer vacation of 2017. This training program was followed by another series of training sessions held at Umm-Al-Qura University and lasted for nine days.

As mentioned earlier, the study was launched during the second semester of the academic year 2017-18 in the Preparatory College premises at Umm-Al-Qura University. This college had four two-story-high buildings, (Q1 to Q4), and each building had 30 classrooms. Classes were equipped with modern educational aids and each class was designed for 25 students. There was a desk-computer for each student and four round tables, each surrounded with five comfortable armchairs to allow for group work. There was a separate table for the instructor. The classes were spacious, well ventilated, well lighted and supplied with air conditioners and fast Internet services.

A few weeks before the experiment began, the researchers got the necessary permissions to conduct this study. The experimental group subjects were informed about the experiment during the last week of the first semester. They were then asked to sign a consent form showing their approval to take part in this study. Furthermore, all necessary arrangements were made to see to it that the experiment would not interrupt the regular daily routine of classes or time-table.

3.3 The Teaching Materials

The teaching material was the same material intended for all pre-medical students and taught during the second semester of each academic year. The material involves two books designed by Oxford University. The first book is called '*Nursing 1*' and the second is entitled '*Nursing 2*'.

Tony Grice wrote *Nursing 1* that includes 14 units. It gives the students the language that allows them to begin their study of medicine using an English medium of instruction. In this book each unit typically, begins with key vocabulary items followed by reading materials on health and medications. It presents doctors, nurses and other staff talking about health issues. The book also teaches communication skills to deal with patients. It is supported with online material to enhance language elements learnt in different parts of the book. This supporting material is found on www.oup.com/elt/oeefc/. The book is also associated with a Class CD and a *Teacher's Resource Book* and a *Workbook*.

'*Nursing 2*' is written jointly by Tony Grice and James Greenan. It also includes 14 units that aim to enhance students' medical vocabulary knowledge. The book's main objective is to assist the students to study the language skills that will prepare them to follow their medical program through an English medium of instruction. The book provides facts, figures, and quotations all about medical and health issues. Like '*Nursing 1*', a Class CD and a *Teacher's Resource Book* together with a *Workbook* accompany '*Nursing 2*'.

3.4 The Action Plan: Its Development and Implementation

The action plan preparation and implementation had gone through two main phases: the first phase involved a series of training sessions and workshops during which the instructors were introduced to the experts' view of the principles of formative evaluation, and given a chance to work out a draft action plan during their training course. The second phase involved the implementation of this plan in toto accompanied with the researchers' field visits to the classrooms. During this stage, the instructors were observed teaching, and given the opportunity to discuss their ideas, and to give their views on how to put the plan into action.

3.4.1 Details of the Action Plan

The action plan contains reference to the most important concepts proposed to enhance the use of formative evaluation, followed by details of strategies that would be used to execute this plan. For instance, the action plan

contains some instructions to focus on setting learning objectives, and to improve the presentation of the learning material and the questioning techniques. The instructors are going to do this (for example using more open questions for brain storming, allowing students more time to think of answers or beginning the lesson with a key question).

Sharing the objectives of lessons is particularly stressed in the action plan and suggested to be realized through a variety of techniques. These may include using questions that the students will be able to answer during or at the end of the lesson, and getting the students to summarize the lesson with giving an account of what they have learned and mastered.

The action plan has also stressed the significance of helping the students to understand the marking criteria used for exploration, which generally focuses on using exemplars from previous work. Exemplar material are presented in contexts such as having work on display and asking students to evaluate that work using a set of criteria proposed by the instructor.

Furthermore, the action plan involves some form of self-assessment, ranging from using '*green, yellow or red traffic lights*' to indicate the student's view of the extent to which a topic or lesson has been understood and digested. Other techniques used to that end involve strategies to enhance self-assessment via tasks that shift responsibility to students. Traffic lights use is associated with actions to cater for the cases where the students singe incomplete understanding. (In that case, the student uses *red or yellow traffic signs*). Furthermore, the plan stresses that teamwork provides significant support for students, as well as insights for instructors into their students' understanding.

An important element of the plan involves interactions through visits of the researchers to the experimental classes. These are done to give an opportunity for the researchers to discuss with the instructors what they are doing, and how this is related to their efforts to execute the action plan. These interactions are directive by definition, but they are also aimed to give the instructors a chance to express their views and their suggestions for improving the action plan implementation.

3.4.2 The Tools for Implementing Formative Evaluation

The tools used for implementing the above action plan which is intended to put formative evaluation into practice, include portfolios, instructor's observations, exercises and tests at the end of each lesson, etc. Learning portfolios are submitted to the instructor on weekly basis. These booklets involve a summary of learning duties done during the week, a plan for the coming week, and suggestions to the instructors. The instructors mark the students' portfolios, but this marking does not involve grades. The instructors then carry-on classroom observation and regularly report the students' status and progress. The instructors try to identify and diagnose the difficulties the students face in learning different tasks. Traffic lights are utilized to signify the students' levels of understanding of the material studied.

3.4.3 Implementation of the Action Plan

Formative diagnostic information and insights to improve the teaching-learning processes are generated from a range of activities. These include classroom questioning and feedback, group work and peer assessment on a piece of learning task, regular short assignments, and from draft or interim assessments.

In this study, the formative evaluation practice with the experimental group includes:

- Basic diagnostic assessment (quizzes, and assignments)
- Setting objectives in collaboration with students to keep them informed and hence engaged in the learning processes right from the beginning and create clear expectations.
- Defining features and criteria of quality work together with students. This is done through setting norm behaviors for classroom culture.
- Specifying the criteria for successful achievement of the learning objectives.
- Rigorous observations to check whether students are on the right track or need help or clarification.
- All this information is normally registered and used as feedback for students to improve their learning, or used during discussion and served as initial guidelines.
- Questions are asked to individual students or in class to check and to build understanding together with learners (Traffic light signs are implemented to show the students' level of understanding)
- Written feedback from instructors, individual students and peers are is regularly given to the class.

- Oral feedback is given based on questions and queries raised by students or from students' answers.
- Preparing assignments for feedback. These are done by instructors or even students on regular basis.
- Presentations on reading assignments: these are prepared by groups or individual students, and presented using data-show and overhead projectors.
- Using examples of good and poor quality of the students' work to assess a particular task in relation to the set evaluation criteria.
- Teacher-led tutorials or reviews are arranged for group and individual students.
- Quizzes and short tests are given at the end of each session to find out what is easy or difficult, and what still needs to be learned or reviewed.

3.5 The Last Phase of the Experiment

At the end of the teaching experiment, which involved full implementation of formative evaluation principles with the experimental group, the subjects took their final examination. This was a computer-based test designed by a group of experienced instructors from the English Language Center and administered to all of the Preparatory Year students including the experimental and the control group subjects. This test was intended to measure the students' achievement in the basic language skills, i.e., listening, grammar, vocabulary, reading, and writing. For securing content validity, the questions of the test were directly based on the ESP material taught in *Nursing 1* and in *Nursing 2*.

The scores of the experimental and the control group students in that achievement test were then tabulated and used to document the students' achievement in English for Specific Purposes.

Later on, these results were statistically analyzed and compared to check whether there was any significant difference between the experimental and the control group achievement in English that could be attributed to the implementation of the formative evaluation principles.

The experimental group subjects were also given a survey during the last week of the experimental period. The survey was intended to obtain data on the students' opinions about formative evaluation. On the other hand, instructors' beliefs about formative evaluation were generated through a series of interviews arranged by the researchers with the staff members who participated in the experiment. Overall, eight staff members had participated in this study. Two of them were directly engaged in teaching the experimental group, two taught the control group and four attended the training sessions and kept stand-by to provide assistance whenever needed. The data generated via the survey and the set of interviews with the study sample were analyses quantitatively and qualitatively using an SPSS 17.0 software.

4. Results

4.1 Impact of Using Formative Evaluation on Students' Achievement

Table 2. shows the Mean, Median, Mode, Std. Deviation, Range, Minimum and Maximum mark for both Control and Experimental groups after experiment

	Con- group	Exp-group
No.	49	49
Mean	75	86
Median	78	85
Mode	73	84
Std. Deviation	7.4	8.7
Range	32	41
Minimum	53	60
Maximum	89	95

The data in table 2 above reveal a considerable difference between the Mean Scores of the two groups. The control group has the mean score of (75); whereas the experimental group mean score is found to be (86). These figures indicate a difference between the two groups and this difference comes in favor of the experimental group. Nevertheless, a *T- test* needs to be conducted to check if this difference is significant or not.

Table 2. T-test for the two groups at post experimental period

Group	No.	M	SD.	T-value	Df	α -Coeff.	Sig. at the level of 0.01	Result
Control G.	49	75	7.4	2.7	48	.001	significant	There is a significant difference between the two groups at 0.01
Experimental G	49	86	8.7					

The *T-value* is found to be (2.7) which is quite significant even at the level of (0.01). This result proves that using formative evaluation can significantly improve the English proficiency level of pre-medical students in the Preparatory College at Umm-Al-Qura University.

The above data can be used to answer the first question of the study, which inquires about the effect of formative evaluation on students' achievement in ESP, and leads the researchers to claim that formative evaluation will have a significant positive effect on students' performance in English for Specific Purposes (E.S.P.).

4.2 Students' Attitudes Towards Formative Evaluation

To measure the subject's attitudes towards formative evaluation, the students were asked to fill in a questionnaire designed by the researchers. The questionnaire's validity was checked and verified by three senior staff members in the College of Social Sciences at Umm-Al-Qura University. The objective of that questionnaire is to elicit the students' views about this type of evaluation. (A translated version of this questionnaire was given to each student to secure proper understanding of its content). Students' views about this practice are summarized in the following table:

Table 3. Students' attitudes toward formative assessment

No.	Response	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
1	Formative evaluation has increased my motivation to work hard	08	70	04	10	08
2	Formative evaluation has assisted me to enhance my achievement in English	13	64	13	08	06
3	Instant feedback assists me to know my errors at the right time.	43	39	04	08	06
4	Self-evaluation has given me the opportunity to understand my own mistakes and to correct them.	14	66	08	07	05
5	Self-evaluation has increased my confidence in myself.	26	54	15	04	01
6	Peer evaluation has given me the chance to practice teamwork and learn from my peers.	60	15	25	01	04
7	Formative evaluation practices are varied, interesting and never monotonous.	45	33	06	08	06
8	Formative evaluation gives me more time to think of the material we study and to learn it better.	34	40	14	06	06
9	Formative evaluation helps us to become more independent learners and to become more responsible for my learning.	25	50	08	10	07
10	Formative evaluation practice with its repeated tests helps us to overcome the exams phobia.	18	61	16	04	01

Table (3) shows the students' attitudes towards formative evaluation and its practices.

More specifically, the above table reveals that (82%) of the students claim that instant feedback allows them to know their mistakes, and gives them the chance to rectify these mistakes on time. At another level, (80%) of the subjects believe that self-assessment which is practiced as part of formative evaluation has enhanced their self-confidence. They add that self-assessment offers them the chance to diagnose their weaknesses and to work out solutions for them.

Furthermore, many students acknowledge that self- and peer- assessment in formative evaluation has been of great help to them. With respect to this issue, it is revealed that (75%) of the students believe that working together with their colleagues has assisted them to learn better and encouraged them to seek support from their peers. It is also found that (78%) of the sample admit that formative evaluation procedures have encouraged them to learn hard to

realize the objectives of their lessons. Furthermore, (77%) of the students admit that formative evaluation practice has assisted them to enhance their English language learning.

(78 %) of the Subjects in the experimental group acknowledge that formative activities and techniques are quite interesting and not traditional or monotonous. Furthermore, (74%) of this group agree or even strongly agree that formative evaluation activities allow them enough time to focus on their learning tasks and to become better learners.

At another level, the greatest majority of the sample, i.e., (75%) attest that formative evaluation activities have helped them to take responsibility of their own learning.

One of the most interesting finding of this study is shown when a vast majority of (79 %) of the subjects claim that formative evaluation practices, which involve repeated testing, has familiarized them with test taking, and hence helped them to overcome examination phobia.

On the other hand, a few students express some negative views towards formative evaluation. These students complain that this type of evaluation does not provide marks that show the level of the students' work.

Another student expresses his distress with the too many assignments and duties of formative assessment. This student says, *"It takes most of our time. We are asked to do a lot of assignments and homework."*

These students express these feelings during private informal sessions with the instructors.

The above data generated through the students' responses can be cited to answer the second question of the study, which asks about the attitudes of the students towards formative evaluation techniques and procedures. It is found that the students hold positive views towards this type of evaluation. Indeed, the vast majority of the subjects have expressed deep satisfaction with formative evaluation techniques.

4.3 Teachers' Views and Attitudes Towards Formative Evaluation

The two instructors who taught the experimental groups and the two who taught the control group in addition to the four staff members who attended the training sessions and played a supportive role during all phases of the experiment are subjected to a series of interviews after they have completed the experiment. From these interviews, it is revealed that these staff members have clear vision and proper understanding of formative assessment and they seem to have very positive attitudes towards this type of assessment.

For instance, when these instructors are asked to talk about the main features and characteristics of formative evaluation, the participants have given detailed and professional account of this practice. They have stated the basic features of formative evaluation and they explained how this form of evaluation with its varied techniques could benefit both instructors and students.

One of the instructors view feedback associated with formative evaluation as *"an important element of the teaching and learning process which can have a positive effect on students' learning."* This instructor sees feedback *"as a means to improve teaching and learning"* and considers it as *"an important informative tool for enhancing students' performance and for strengthening their motivation.* He says: *"It is an instrument that can be used by the instructor to know the exact level of his students' performance."* He adds that *"feedback can also be used for revising and rectifying or modifying our own teaching strategies."*

Another instructor confirms that *"feedback as an essential element of formative evaluation practice could have a very positive effect on learners' performance,"* and recommends that: *"instructors should make sure that positive and encouraging statements are provided for their students to reinforce their correct responses."*

One instructor agrees with this view and adds that: *"If students are provided with positive comments on their performance, this will help to engage them more in their learning process, and hence they may become better learners and good achievers."*

"Formative evaluation as an instructional procedure," says one of the instructors *"encourages students to participate actively and to become responsible for their own learning."* This instructor suggests, that *"this could be realized by encouraging the students to focus on their learning situations and hence they are allowed to ask relevant questions about parts of the lesson they didn't understand while the instructor was still handling the lesson."*

One of the instructors commends the idea of involving students in working out the lesson plans and in setting the learning objectives. He says: *"Sharing learning objectives with students is a vital component of effective formative evaluation, and it stands as a key element of engaging the students in the learning process."* He adds that he expects teachers to share learning objectives with their students, and to be trained to implement the formative evaluation

strategies that emphasize sharing learning objectives at the beginning of each session.

When asked about self-assessment as one of key features of formative practice, one instructor states "*Self-assessment assists the students to evaluate their own progress or lack of progress. It can definitely increase learners' awareness of what they are learning and hence improve their learning outcomes.*"

Alongside these positive views about formative evaluation, some instructors have raised some reservations about this type of assessment. One instructor expresses his reservation saying that: "Implementing formative evaluation is quite a tiring practice. It is time consuming and it requires more effort, time and resources."

Another instructor raises concerns about peer assessment maintaining that, "*It is quite a complicated task and it requires lots of training for the students to do this job properly.*" He adds that, "*Getting students involved in the process of evaluating their own or their peers' work might create some disturbance and noise in the classroom, and in response to this, if too much restriction or control is used to maintain order, the learning process is more likely to become dull and not creative.*". This instructor adds another reservation saying that, "*Students may not always be ready to appreciate feedback provided by their colleagues.*".

5. Summary and Conclusion

Evaluation is an important element in any educational process. In this part of the world, the most common assessment practice is summative evaluation, which stands in sharp contrast with formative evaluation. Summative evaluation measures students' achievement after they complete a certain course of study. On the other side, stands formative evaluation, which incorporates tests and examinations within the learning process in order to permit teachers to identify learning needs or problems and adjust them at earlier stages. This form of assessment has appeared in the educational field as an effective evaluation approach. Many recent studies, say Heritage, Kingston, & Nash, (2012), have shown that this type of evaluation is very effective in promoting students' level of academic achievement and in raising their interest and motivation for learning.

This good news about formative evaluation has encouraged the researchers to seize the opportunity to explore the suitability of this modern assessment approach for Saudi ESP learners. This initiative comes in response to The Saudi Government 2030 Vision that encourages educators to seek the most up-to-date and effective tools and implement them to modernize the educational process in the Kingdom. However, before implementing these largely western modern techniques in toto is recommended that they must be carefully investigated and studied to check their efficacy in an occidental community. This will help to avoid any unnecessary negative outcomes or shortcomings in case these modern techniques are used in this country.

The present research, therefore, aims mainly at investigating the effectiveness of formative evaluation in improving a group of Saudi ESP students' achievement in English for Specific Purposes. This study is also intended to find out the instructors' and learners' views regarding formative evaluation.

To that end, the researchers have conducted this study on a sample of 98 pre-medical students. These were divided into an experimental and a control group with 49 subjects in each. The Instructors of the two groups were subjected to intensive training sessions and workshops arranged abroad and inside the Kingdom.

During the experimental period, which lasted for sixteen weeks, two books designed by Oxford as part of their ESP program "*English for Career*" were taught. All principles and techniques of formative evaluation were fully implemented in teaching this ESP course under direct supervision of the researchers. At the end of the semester, the subjects of the experimental and the control groups sat for the same end of course final achievement examination.

Experimental students' scores in that final exam were tabulated and compared to that of the control group. A t-test was further performed to check if there were any significant differences between the two groups that could be attributed to the implementation of formative evaluation procedures. The results have shown that the experimental group students' performance is superior to that of their counterpart in the control group.

The learners' attitudes towards formative evaluation were checked through a questionnaire, which was given to them immediately after they had finished their medical English language course. A quantitative analysis of the students' responses to this questionnaire shows that the students' attitudes towards formative evaluation are predominantly positive. These students admit that formative evaluation has encouraged them to work hard and to do well in their course of learning. Students also assure that formative evaluation procedures have offered them the chance to understand their own errors and rectify them before it is too late. They further claim that self- and peer- assessment

as an essential part of formative evaluation has increased their self-confidence and autonomy and given them the opportunity to practice teamwork and to learn from their colleagues.

From a series of interviews held with the instructors after the experiment, it becomes obvious that these subjects have a very clear vision about this type of assessment. They give full account of the different procedures and techniques used to implement this type of assessment. They outline the major benefits of formative evaluation for both instructors and students. They go further to comment on self-assessment and admit that it helps the learners to gain detailed information about their own progress or lack of progress confirming that self-assessment increases students' self-confidence.

Alongside this positive perception about formative evaluation, some instructors have raised concerns regarding this type of assessment claiming that implementing full-fledged formative evolution practice is "*quite a tiring and demanding job*". They say, "*It is time consuming and it requires more effort, time and resources*".

6. Discussion and Recommendations

Formative evaluation involves a variety of systematic procedures and strategies, beginning with teachers planning, setting and sharing learning objectives with students, marking, and provision of feedback. Each of these strategies is intended to meet a particular purpose of formative evaluation. This can help the learners and instructor to concentrate on the objectives of each lesson and they both become fully aware of the learning task (Bell, & Cowrie, 2001).

Formative evaluation strategies, therefore, allow the instructor to follow the progress made by the students and to diagnose learning problems and provide feedback that meet students' learning needs. However, this requires the teacher to know where students are in their learning trip, in order that he can plan where the students need to go next. Instructors can obtain all this information about their students through direct observation and carefully designed questions (Black, & William, 2006). Indeed, the instructors in this experiment have adhered to these strategies and applied them fully in this study. So the success of this experiment in improving the performance of the subjects of in their ESP course could be attributed to the proper application of these strategies.

Umar (2018) conducts an experimental study on language testing. His research finds that effective questioning and careful observation can help the instructor to check the level of his/her students' understanding and allow him/her to take them forward in their learning process. He adds that, the students can achieve a learning objective if and only if they understand that learning objective properly, and that they know what they need to do to realize that specific objective. This current study has supported Umar's findings. In this current experiment, it is revealed that assisting the students to understand each lesson's objectives thoroughly and encouraging them to design their own questions help them to become better learners. Furthermore, the instructors have encouraged their students to practice self-assessment as an essential element in the learning process. Indeed, self-assessment has been practiced extensively in this study and this seems to reflect positively on the students' achievement. This comes in line with Rabinowitz (2010) who classifies self-assessment as a practice that secures perfect learning and deep understanding.

In successful formative evaluation practice, the instructor, interacts closely with students and follows their learning progress right from the beginning (Atkins, Black, & Coffee, 2001). Hence, it is important to explain how this interaction takes place, emphasize its importance for learners, and show them how it can be implemented to assist them to promote their learning. In this study, interaction between instructors and their students was given special consideration and both teachers and students were encouraged to interact with each other right from the start of each lesson. The instructors used to develop the lesson objectives in collaboration with their students, and continue the learning process together until the end of learning journey.

Previous studies show that feedback is the corner stone of this type of evaluation (Hattie, & Timperley, 2007; Herman, 2013; Mayer, 2006; & Aslam, 2015). Black and William (1998), in their extensive review of research on testing and measurements state, "*We know of no other way of raising standards that is more effective than adequate feedback provided at the right time*," (p.7). This current experiment confirms the importance of feedback and finds that feedback is more effective when it is given instantly and when it gives specific guidance for how to achieve the pre-set learning objectives.

Other studies on timing of feedback in formative evaluation, confirm that feedback is most effective within minutes (or even seconds), or at most, within a period of days (Mayer 2006). However, some other studies warn that feedback should not be provided too quickly, i.e., before the student has the chance to attempt to work out the problem himself (Omar, 2014).

In this study, the researchers recommend attaching feedback to scaffolded learning. They assume that it is always

important to "scaffold" information given in feedback –this simply means to give as much information as the learner needs to reach the next learning stage. Aslam (2015) finds out that scaffolding enhances and facilitates learning.

Other studies recommend effective questioning as another essential element in formative evaluation. They suggest that questions should be used to reveal the learners' level of understanding and to identify possible misunderstanding or misconceptions (Mayer 2006). It goes without saying that effective questioning goes far beyond the level of superficial questions that are intended to generate "Yes" or "No" answers or questions that stress memorization rather than reasoning and deep thinking.

This leads the instructors in this study to guide their students towards deeper understanding of their lessons through extended dialogues that concentrate on a set of well-designed questions that yield adequate and sufficient information. Along the same line, the instructors in this study used to encourage their students to form their own questions in order to enhance and widen their knowledge of the subjects they are learning.

Self-evaluation is an important practice in any learning experience (Rabinowitz 2010). Indeed, self-evaluation is a key element of the work of all professionals, so if the instructors want their students to become professional learners, they should actively promote the element of self-assessment. Self-evaluation practiced in this study has been highly appreciated by the subjects of this study. The students say it helps them to become responsible for their own learning and to become more confident and better learners.

A controversial issue that raises argument among formative evaluation practitioners is the issue of giving grades when practicing formative evaluation. In response to this, the researchers believe that marks or grades alone do not secure adequate learning outcome. Therefore, in this study, the instructors avoid giving grades when assessing students' work and this could be one of the reasons that help the students to do well in this experiment. This view of not giving grades is supported by Shepard (2000) who says when marks are provided; they often dominate students' thinking, and lead them to see grades as the ultimate objective of learning.

Motivation is commonly referred to as an essential element in the learning process (Lin & Gronlund, 2000). In this experiment, the instructors make sure that formative evaluation with its varied activities is utilized in a way that motivates the learners and raises their interest in learning. Furthermore, the instructors have tried their level best to avoid overloading students with homework and assignments as this may lead to students' frustration and demotivation.

Umar (2018) claims that in formative assessment practice, tests and exercises can serve as effective indicators to students' learning progress, but for these exercises and tests to be effective, they must be clear, varied and relevant to the learning aims. In this study, the exercises are designed with great care to give each student clear directions on how to improve, and each student is given a chance and is helped to promote and perfect his performance through these exercises.

The most impressive finding in this study is revealed when the majority of students acknowledge that formative evaluation has led them to get rid of examination phobia and anxiety. In fact, taking tests regularly and repeatedly as part of formative assessment practice has familiarized the students with test taking. This practice has helped the students to overcome test tension and to overcome examination phobia. This finding confirms the tenor of the Systematic Desensitization Theory developed by the South African Psychologist, Joseph Wolpe, who developed this theory in the early seventies.

Finally, the researchers believe that successful formative evaluation implementation needs intensive teacher training, more administrative coordination, more logistic support and continuous teacher supervision. These recommendations come in line with suggestions made earlier by a number of outstanding scholars in the field of language testing and assessment such as Edwards (1999); Atkins, Black & Coffee (2001); McDaniel, Rodger, & McDermott (2013).

7. Recommendation for Further Studies

Formative evaluation has proved to be an effective teaching technique for this particular sample of students, i.e. students of the Preparatory College who are studying English for medicine; however, further research needs to be conducted on students at different academic levels and who are enrolled in different academic disciplines. Furthermore, this study has mainly involved male students at pre-medical level; therefore, further studies need to be done on female students to check the efficacy of this modern evaluation technique on their achievement in medical English and in other subjects. At another level, the scope of this study is limited to (ESP). Hence, it is recommended that future research should investigate the effect of formative evaluation on general language courses and more research is needed to assess the effect of this practice on separate language skills such as listening, speaking, reading

and composition writing.

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