

# The effects of formative evaluation on students' achievement in English for specific purposes

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**Abstract.** The research attempts to trace 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 learners at a Saudi university. They were divided into two equal groups; one is intended to act as an experimental and the other is taken to represent the control group. The students of the experimental group were given their English for Specific Purposes course following the formative evaluation techniques whereas the second group was taught their ESP course in accordance with the traditional assessment principles. The experimental group instructors were given intensive training courses in Saudi Arabia and abroad on how to use formative evaluation principles in the classroom. At the end of the experimental period which continued for four months, the experimental and the control group sat for the end of term examination which was designed for all candidates in the Preparatory College. Grades of all subjects in the two groups in the final exam were compared. The experimental group student's performance was found to be significantly 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 views about this form of evaluation. The research concludes with some suggestions 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.

## INTRODUCTION

Since the start of the 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 several advanced countries such as Russia, The People Republic of China, Korea and Japan (Hassan, 2014).

In Saudi Arabia, as 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, 2012). But

unfortunately, most of the Saudi students come to the university and their level of English is far below the level that allows using English as a medium of learning. In 2009, however, a Preparatory Year Program was initiated in most Saudi universities. The objective of that Preparatory Year Program is to fill the gap between the proficiency level of students after passing the secondary school examination, and the level required to qualify the students to use English as a language of instruction. In the Preparatory Year Program mentioned above, the students are placed at 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, 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 semesters 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 of the course.

Unfortunately, this type of examination has many shortcomings, as it discourages deep learning and the backwash in such a system of assessment is usually negative (Baker, 2012). 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 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). Along the same line, Mahdi (2020) said summative evaluation does not give enough guidance or directions that allow the student to focus on his /her lesson and does not show him/her how to overcome learning problems.

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 hence, deprived of the opportunity of a 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 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 *et al.*, 2001). In formative evaluation, learning outcomes are enhanced by timely and accurate feedback that provides insight into the learning process (Ruiz-Primo and Li, 2013). Furthermore, formative evaluation helps the instructor to collect relevant 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. The formative evaluation also provides essential information that helps in decision-making, especially in the development and modification of curricula (Linn and Grolund, 2000).

Fadel (2019) claims that 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 tool for checking learning achievement which is commonly done via **summative evaluation** (Looney, 2011). However, now this view has changed radically, and people in charge of education have begun to develop a wider view of assessment that covers 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 achievement of Saudi learners doing an ESP course at the University of Umm-Al-Qura, K.S.A. The results of this research can be manipulated to modernize the educational style that stands as one of the main objectives of the **Kingdom's 2030 Vision**.

### 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 for enhancing students' academic achievement in general and their performance in English in particular (Black and 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 activity. 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.

### Research questions

This research is launched to answer three main

questions:

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

## REVIEW OF LITERATURE

### 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 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 positions. Saleem (2020) considers formative assessment as a tool that helps the instructor to specify where the student stands in his learning trip.

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. Indeed, formative assessment and summative evaluation are quite different in that summative evaluation focuses mainly on stating the students' level of achievement to decide who passes and who does not pass (Sadler, 1989).

### 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 and Linqaunti (2013), the instructor can get information from formative evaluation during the learning process, and manipulate this knowledge to improve his teaching practice and to give guidance to the learners on how to promote and enhance the process of their learning. Hence, the supply of feedback is built upon the information collected during the teaching-learning procedures.

To handle feedback issues through marking, teachers are advised to fully acquaint themselves with current research findings. These findings assure that giving marks can have a negative influence on the students' performance (McDaniel *et al.*, 2013). Some researchers claim that students generally overlook comments which

include guidance and directions when the teacher gives (Heritage, 2012).

### 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 *et al.*, 2001). It is known that making an 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.

### 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 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 learning 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 learning point or objective (Black and William, 1998).

Practically, formative evaluation begins by specifying the objectives of learning and how they can be realized. In this case, the instructor sets the specific tasks to be performed, and should also specify the learners' level of attainment of these specific learning tasks. To that end, the instructor designs a set of steps to explain and analyze learners' answers and give feedback relevant to the target learning objective. The instructor might be required to interact directly in the learning process to check the efficacy of the feedback.

### Effectiveness of peer feedback

Saeed *et al.* (2021) conducted a study to see how online peer feedback could improve essay writing and learning. The study seeks to identify the effects of online peer

**Table 1.** Mean, median, mode, std. deviation, range, minimum and maximum mark for both the control group and experimental group before the experiment.

	Control group	Experimental 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

feedback on subjects' essay writing, feedback quality and domain-specific knowledge in sciences. An online peer feedback platform, was designed and these instructional supports were given within this platform. Subjects were asked to write an argumentative essay (individually), and with their colleagues (collaboratively). Then they were asked to review their essays in the light of feedback provided (individually). The results showed that subjects in the online peer feedback condition did significantly better than the others in terms of essay writing.

### Formative evaluation and scaffolding

Scaffolding is a concept used to denote the assistance provided by instructors, parents or even peers that helps the learner to solve a problem, perform a certain task, or realize an objective that is beyond the learner's current level or capacity. Wood *et al.* (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 support both comprehension and interaction.

## METHODOLOGY

### Participants

The subjects of this study were drawn from the Preparatory Year students. These subjects 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 the Oxford Proficiency Test when they first joined the Preparatory Year in 2017-2018. Each of the four classes encompasses 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 Groups 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 to represent the control group. In order to assure that the control and experimental group 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 more than six years to classify the Preparatory Year students according to their level of proficiency and to place them in homogeneous classes. The results of this test are shown in Table 1 and Figure 1.

Table 1 and Figure 1 indicate that the two groups have similar scores. The experimental group's mean score is (72.9) compared to (73.2) by the control group. This result can be used to prove that the two groups were at similar proficiency levels in English at the pre-experimental stage.

### Preparation of the setting and instructors' training

The research was done 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 that semester, which normally lasts for four months, 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 two groups. These instructors were trained on how to use formative evaluation principles when teaching a medical English course. The

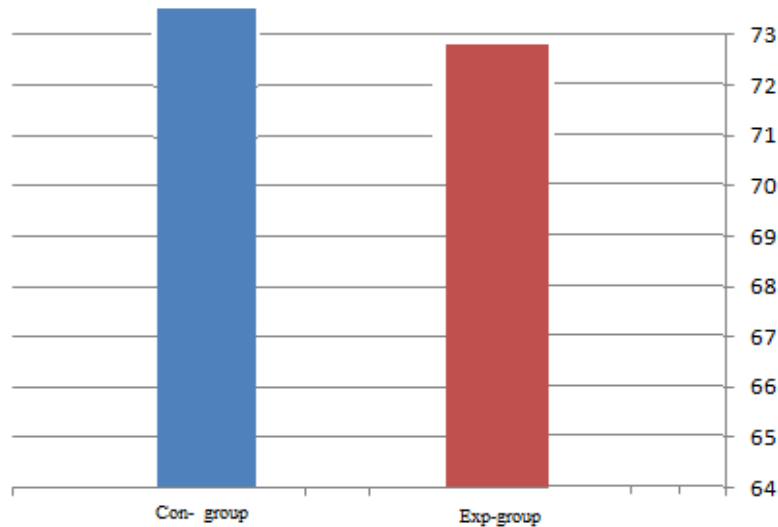


Figure 1. Scores of the two groups.

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 term of 2017-18 at Umm-Al-Qura University. More specifically, it was conducted in The Preparatory College which has four buildings, (Q1 to Q4). The classes were quite spacious and fully equipped with proper educational facilities. The rooms were also supplied with reasonably fast Internet services.

Each of these classrooms was prepared to accommodate a maximum of 25 students, and in each classroom, there were four round tables, each surrounded with five comfortable armchairs to allow for group work, and there was a separate table for the instructor.

Sometimes, before the experiment began, the researchers had secured the permits to perform this study. The students who were going to participate in the experiment were informed during the last week of the first semester and requested to sign a form that shows their consent to participate in this research project.

### Materials used in teaching this course

The material taught in this experiment involves two books designed by Oxford University. The first book is called '*Nursing 1*' and the second is entitled '*Nursing 2*'.

*Nursing 1* which includes 14 units was written by Tony Grice. 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/oefc/](http://www.oup.com.elt/oefc/). The textbook is accompanied by a CD and a *Teacher's Guide Book* together with an *Exercise Book*.

*'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 academic program using English as a language of instruction. The book provides facts, figures, and quotations all about medical and health issues. Like '*Nursing 1*', a CD and a Teacher's Guide Book accompany '*Nursing 2*'.

### The action plan: Its development and implementation

The action plan preparation and implementation have gone through two main phases: the first phase involved a series of training sessions and workshops during which the instructors were introduced to the steps of applying formative evaluation, and asked to work out a draft action plan during their training course. The second phase involved the implementation of this plan in toto accompanied by 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.

### Details of the action plan

The action plan contained references to the most

important concepts proposed to enhance the implementation of formative evaluation. This stage was succeeded by explaining the strategies to execute the plan. For instance, the action plan contained some instructions on how to set learning objectives, and to improve the presentation of the learning material and the questioning techniques. The instructors would do this through open questions for brainstorming, and give students enough time to answer these questions.

Sharing the objectives of lessons is particularly stressed in the action plan and suggested to be realized through different ways. These may include questions for the students to answer during or after the lesson, and the students may be asked to summarize the topic of the lesson they had studied to show the level of their mastery of that topic.

The action plan had also highlighted the significance of assisting the learners to know the marking system applied for exploration, which generally stresses the use of familiar examples. Some examples were presented in contexts and displayed through different means to the students who were instructed to evaluate that work according to criteria proposed by the instructor.

Furthermore, the action plan involved some form of self-evaluation. This technique uses *green, yellow or red* traffic lights to indicate the student's view of the level of his /her understanding of the topic or lesson learned. Other techniques used to that end involve strategies to enhance self-assessment via tasks that shift responsibility to students. Traffic lights use was associated with actions to cater for the cases where the students sign 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' level of understanding.

An important element of the plan involves interactions through visits of the researchers to the experimental classes. These were done to give chance for the researchers to exchange views with the instructors and to discuss their efforts and the steps they follow to execute the action plan. These interactions were directive by definition, but they were also aimed to give the instructors a chance to express their views and their suggestions for improving the action plan implementation.

### ***Tools for implementing formative evaluation***

The tools used for implementing the above action plan which was intended to put formative evaluation into practice, include portfolios, instructor's observations, exercises and tests at the end of each lesson, etc. Learning portfolios were submitted to the instructor on weekly basis. These booklets involve a summary of the learning duties done during the week and a proposal for what is to be done the next week. 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 were utilized to signify the students' levels of understanding of the material studied.

### ***Implementation of the action plan***

Formative diagnostic information and suggestions to improve the instruction processes are obtained from a set of practices. These cover direct written and oral questions together with group work and peer assessment on a piece of the learning task, regular short assignments, and drafts 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 by setting norm behaviors for classroom culture.
- Specifying the criteria for 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 jointly with learners. (Traffic light signs are implemented to show the students' level of understanding)
- Written feedback from instructors, individual students and peers 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 the 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.

**Table 2.** Mean, median, mode, std. deviation, range, minimum and maximum marks for both Control and Experimental group after the experiment.

	Control group	Experimental 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 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 prepared by three experienced instructors from the English Language department 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 ESP course taught during the term. The test covered 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 *Nursing 2*.

The scores of subjects in that achievement test were then tabulated and used to document the learners' achievement in the target subject, i.e., English for Medicine.

Later on, these results were statistically analyzed and compared to check whether there were any significant differences between the experimental and the control group achievement in the ESP course 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. Furthermore, the 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 on standby to assist whenever needed. The data generated via the survey and the set of interviews with the study sample were analyzed quantitatively and qualitatively using an SPSS 17.0 software.

### RESULTS

#### Impact of using formative evaluation on students' achievement

The data in Table 2 reveal a significant difference between the average scores of the two groups. The first group, i.e., the control group has the mean score of (75); whereas the experimental group's mean score is shown to be (86). These figures indicate a notable difference between the two groups and this difference favors the experimental group. Nevertheless, a *T-test* needs to be conducted to check if this difference is significant or not.

Table 3 shows that the *T-value* is (2.7) which is significant even at (0.01). This finding proves that using formative evaluation may safely be used to improve pre-medical students' performance in English for Specific Purposes at Umm-Al-Qura University.

The data in Table 3 can be used to provide answers to the first research question. That question inquiries about the effects of formative evaluation on students' achievement in ESP, and leads the researchers to confirm that formative evaluation will have a significant positive effect on learners' performance in E.S.P.

#### Students' attitudes towards formative evaluation

To identify the students' views regarding formative evaluation, the students were requested to respond to a questionnaire prepared 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 a proper understanding of its content). Students' views regarding formative evaluation practices are given in Table 4. Table 4 shows the learners' attitudes towards formative evaluation and its practices.

**Table 3.** T-test for the two groups at post-experimental period.

Group	No.	Mean	Standard deviation	T-value	Df	$\alpha$ -Coeff.	Sig. at the level of 0.01	Result
Control G.	49	75	7.4	2.7	48	.001	Significant	This result shows a difference between the control and the experimental group at 0.01

**Table 4.** Learners' attitudes toward formative evaluation practice.

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	10	07	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	20	01	04
7	Formative evaluation practices are varied, interesting and never monotonous.	45	33	07	09	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 our 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

More specifically, Table 4 that 82% of the students claimed 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 claimed that self-assessment had enhanced their confidence. These students added that the chance which was given to them to assess their performance had helped them to diagnose their learning problems and to work out solutions for them.

Furthermore, many students acknowledged that self- and peer-assessment in formative evaluation had been of great help to them. With respect to this issue, it was revealed that (75%) of the students believe that working together with their colleagues had assisted them to learn better and encouraged them to seek support from their peers. It was also found that 78% of the sample admitted that formative evaluation procedures had encouraged them to work hard to realize the objectives of their lessons. Furthermore, 77% of the students admitted that

formative evaluation practice has assisted them to enhance their English language learning.

78% of the experimental group students acknowledged that the techniques and activities involved in formative evaluation practice were quite interesting and not traditional or monotonous. Furthermore, 74% of this group claimed that formative evaluation activities allow them enough time to focus on their learning tasks and to become better learners.

It is also found that three-quarters of the sample, i.e., 75% attested that formative evaluation activities have helped them to take responsibility for their own learning.

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

At another level, and during private informal sessions with the researchers, some of the students expressed



some form of dissatisfaction with formative evaluation practice. These students complained that this type of evaluation did not provide marks to show the level of the performance.

Furthermore, one of the students expressed his distress with the too many assignments and duties of formative assessment. This student said, *"It takes most of our time. We are asked to do a lot of assignments and homework"*.

The above data generated through the students' responses could be reported to provide an answer for the second question of the research, which seeks to specify the attitudes of the students towards formative evaluation techniques and procedures. It is quite obvious that the students hold positive views towards this type of evaluation. Indeed, the vast majority of the subjects had expressed deep satisfaction with formative evaluation techniques.

### **Teachers' views and attitudes towards formative evaluation**

The two instructors who taught the experimental group, 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, were requested to respond to a series of interviews after they had completed the experiment. From these interviews, it is revealed that these staff members had clear vision and proper understanding of formative assessment and most importantly, it is found that these instructors had quite positive attitudes regarding this form of evaluation.

For instance, when these instructors were asked to talk about the main features and characteristics of formative evaluation, the participants had given a detailed and professional account of this practice. They had 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 viewed 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 confirmed 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 suggests that: *"Teachers must be encouraged 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 the key features of formative practice, one instructor states: *"Self-assessment assists the students to evaluate their own progress or lack of progress. It can increase learners' awareness of what they are doing and hence improve their learning outcomes."*

Alongside these positive views about formative evaluation, some instructors had raised some reservations about this type of assessment. One instructor expressed 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 expressed 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 the feedback provided by their colleagues."*

### **DISCUSSION**

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 specify learning needs or learning difficulties and cater for them at earlier stages. This form of evaluation has appeared in the field of education as an efficient assessment approach. Many recent studies, such as Heritage *et al.* (2012), have asserted that this form of evaluation could help in promoting learners' level of performance and could help to raise their interest in learning and increase their motivation.

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, it is recommended that they must be carefully investigated and studied to check their efficacy in an oriental community. This will help to avoid any unnecessary negative outcomes or shortcomings in case these modern techniques of evaluation are used in this country.

The present research, therefore, aims mainly at investigating the effectiveness of formative evaluation in improving Saudi ESP students' performance in medical English. 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 formed of 98 male subjects taking an ESP course. 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 one term, 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 the direct supervision of the researchers. At the end of the term, the subjects of the experimental and the control group 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. Some differences were observed in the scores of the students. It is revealed that the experimental group students' performance was significantly better than that of

their counterparts 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. The students' responses to this questionnaire were analyzed quantitatively, and this revealed that the subjects' attitudes towards formative evaluation were quite positive. The subjects claimed formative evaluation had encouraged them to work hard and to do well in their course of learning. Students also assured that formative evaluation procedures had offered them the chance to understand their own errors and rectify them before it is too late. They further claimed that self-and peer-assessment as an essential part of formative evaluation had increased their self-confidence and autonomy and allowed them to practice teamwork and to learn from their colleagues.

From a series of interviews held with the instructors after the experiment, it became obvious that these subjects had a very clear vision about this type of assessment. They gave a full account of the different procedures and techniques used to implement this type of assessment. They outlined the major benefits of formative evaluation for both instructors and students. They went further to comment on self-assessment and admitted that it helped 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 raised concerns regarding this type of assessment claiming that implementing full-fledged formative evolution practice was "*quite a tiring and demanding job.*" They said, "*It is time-consuming and it requires more effort, time and resources.*"

## CONCLUSION

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 (instructors and their students) become fully aware of the learning task (Bell and 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 meets students' learning needs. However, this requires the teacher to identify his/her students' position in their learning trip, so he/she can plan for the next learning stage. Instructors can obtain all this information about their students through direct observation and carefully designed questions (Black and William, 2006).

Fortunately, 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 in their ESP course could be largely 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 journey. He adds that the learners can realize a learning objective 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 helps 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 *et al.*, 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, the interaction between instructors and their students were 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 continued the learning process together until the end of the learning trip.

Previous studies show that feedback is the cornerstone of this type of evaluation (Hattie and 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 the timing of feedback in formative evaluation, confirm that feedback is most effective within minutes (or even seconds), or at most, within 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 that scaffolding can enhance and facilitate learning.

Other studies recommend effective questioning as another essential element in formative evaluation. These studies suggest that questions should be asked to reveal the students' level of understanding and to pinpoint possible misunderstandings or misconceptions (Mayer, 2006). It goes without saying that efficient questioning is different from superficial questions that are intended to generate "Yes" or "No" responses or questions that stress memorization but never care for reasoning and deep thinking.

This leads the instructors in this study to guide their students towards a 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 work seriously to promote the element of self-assessment. Self-evaluation practiced in this study has been highly approved by most members of the sample of this research. The students said it had helped them to become responsible for their own learning and to become more confident and better learners.

A controversial issue that raises arguments 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 outcomes. Therefore, in this study, the instructors were advised to avoid giving grades when assessing students' work and this could be one of the reasons that helped the students to do well in this experiment. This view of not giving grades is supported by Shepard (2000) who claims that when grades are given; they often occupy the learners' minds, and lead them to see grades as the main objective of learning.

Motivation is commonly referred to as an essential element in the learning process (Lin and 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. Indeed, 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. Taking tests regularly and repeatedly as part of formative assessment practice familiarizes the students with test-taking. This practice helps 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 several outstanding scholars in the field of language testing and assessment such as Edwards (1999), Atkins *et al.* (2001), McDaniel, Rodger and McDermott (2013).

## RECOMMENDATION

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 who planned to study medicine; 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. At another level, the scope of this study is limited to (ESP). Hence, it is recommended that future research should investigate the effects of formative evaluation on general language courses and more research is needed to assess the impact of this practice on general English language skills such as listening, speaking, reading and composition writing.

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