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The effectiveness of an ESP course based on the participatory approach in enhancing the Life Sciences students' English language learning and satisfaction with the course

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Abstract :

This study aimed at designing an ESP course for the Life Sciences students at the Faculty of Sciences and Arts, King Khaled University, Saudi Arabia using the participatory approach. Learners' needs were analyzed through a needs analysis questionnaire administered to: (1) 60 students at the Life Sciences Section in Dhahran Ajanoub Faculty of Sciences and Arts by the end of the first term 2011/ 2012, and (2) 12 subject matter specialists teaching them. During the participatory sessions which were attended by six students, six subject matter specialists and six English language instructors during the second term, results of the needs analysis were presented and discussed till a consensus was reached. In addition, the participatory approach was used for identifying course goals, selecting topics, developing and evaluating materials and activities. The course was taught to 60 Life Sciences students by the beginning of the academic year 2012/2013 and lasted for a whole term. Results of the study revealed that the participatory approach was effective in enhancing the students' English language learning. In addition, results revealed a great level of students' satisfaction with the ESP course. Recommendations and suggestions for further research are introduced.

Introduction

English for Specific/ Special Purposes (ESP) is in contrast to general English. It is designed to meet the specific needs of a particular group of learners who are usually aware of these needs. It deals with specific topics that are related to the learners disciplines. It is also centered on language appropriate to the identified needs and handled topics. Language needs analysis is prerequisite for designing a language course in the ESP setting.

Awareness that the general English courses met the needs of neither the learners nor employers, the term English for Specific/ Special Purposes (ESP) appeared in the 1960s (Brunton, 2009). According to Brunton, it could be said that ESP has increased over the decades as a result of market forces and a greater awareness amongst the academic and business community that learners' needs and wants should be met wherever possible. The main divisions of ESP are English for Academic Purposes (EAP), English for Occupational Purposes

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(EOP) and English for Science and Technology (EST). As more groups of learners or specific stakeholders feel the need for specific courses, more divisions of ESP emerge such as English for Chemists, Biologists, etc.

An indisputable fact about ESP is that it should be based on the learners' and stakeholders' needs. If needs are clear, the learning aims can be expressed more easily and the language course can become motivating. If the learners' needs are not taken into account, the course will be based on unsuitable or irrelevant material. Register analysis, target situation analysis, and needs analysis were used as bases for developing ESP courses that meet the learners' and stakeholders' needs.

Review of literature shows that students usually report wants rather than needs which usually fail to fulfill their needs. In addition, stakeholders, institutions and employers often perceive wants and needs differently from students. Brunton (2009) reported how perceived needs of Hotel maids in a Hotel in Waikiki failed to meet the expectations of the learners' themselves in Jasso-Aguilar (1999) and how Malaysian University courses in Hotel Management and Tourism failed to meet the wants and needs of the students with a lack of skills and genres covered in their courses in Stapa and Jais (2005). Therefore, needs analysis must include the students input from the beginning of a course design. Since stakeholders, institutions and employers often perceive wants and needs differently from students, they should also be included in the process of course design from the beginning. Besides, Baleghizadeh and Oladrostam (2010) concluded that if English language teachers cooperate with content teachers in the process of materials development of ESP courses, the product will enjoy a higher quality for the target students.

Gao (2007) summed up issues of ESP course design in her paper about an ESP course for business students in China. "When designing an ESP course, the primary issue is the analysis of learners' specific needs. Other issues addressed include: determination of realistic goals and objectives; integration of grammatical functions and the abilities required for future workplace communication, and assessment and evaluation".

Today the debate is moving towards the area of negotiated syllabi; if learners can state their wants and needs, then surely they can also help design their own courses. Kaur (2007) explained that when ESP learners take some responsibility for their own learning and are invited to negotiate some aspects of the course design, they feel motivated to become more involved in their learning. A move towards negotiated or process orientated syllabi with students' actively involved with their courses is noticeable in recent ESP literature.

Many new trends in doing social sciences research are concerned with the relations between those who conduct research and those who are research subjects. The crucial shift is from doing research on people to doing research with people. "The participatory approach ensures that research is owned and controlled by research participants as well as researchers" (French and Swain, 2004: 2). According to Wiggins (2004), adult participants learn better when they are involved in different aspects of instruction. He, therefore, added that adult ESL participants must learn to define their needs, conditions, techniques, and materials.

According to Taylor (2001), stakeholders of curriculum development may help identify needs for training, set aims and learning objectives, contribute to the development of the subject matter to be taught, and participate in delivery and evaluation of the curriculum. Taylor pinpointed that curriculum development is more likely to be effective if it is undertaken using a participatory approach as proven in successful experiences of participatory approaches increasingly used in rural development and other fields.

Unlike the classical approach to curriculum development which is a top-down approach, the participatory approach is a down-up process. According to Crowder (1997), the participatory/ interactive approach follows a "subjectivist", process-oriented paradigm. It puts emphasis on participation and interaction among the various interested groups or educational stakeholders. This includes the learners themselves who are seen as having an important role to play in curriculum formulation. The goal is to stimulate different actors to participate in a dynamic, interactive process that allows their perceptions of the "ideal curriculum" to

be made explicit and then made compatible and/or modified as necessary to produce the curriculum.

Newman's (2001) participatory approaches to learning are active approaches that encourage people to think for themselves. Participants actively contribute to teaching and learning, rather than passively receiving information from outside experts, who may not have local understanding of the issues. The approach encourages people to share information, learn from each other, and work together to solve common problems. Participatory approaches are used in situations where a number of people must work together to resolve a common problem.

Context of the problem

The Life Sciences Section was opened in the Faculty of Science and Arts in Dahran Al-Janoub in 2010. Except for the Intensive English Language Course, specifications for all subject matter courses were provided in details. Only suggestions of broad items and six commercial book titles to this course were given. Examination of the recommended books and aligning them to the course specifications revealed the following: the books included a grammar book that majors of the English section use for four semesters, which, of course, does not deal with specific grammar or language functions that the students at this section need. No mention was given concerning what to teach from this book to those particular students. Another suggested book dealt with developing general writing skills such as writing a paragraph, writing about hobbies and daily routine, etc. One book was on English for engineering students. The three other suggested books dealt with English for Science. These books were designed to address a wide range of Science students but not tailored to meet the specific needs of a group of learners such as students of the Life Sciences at the Faculty of Science and Arts in Dhahran Aljanoub, Saudi Arabia.

Furthermore, feedback to the researcher, as head of the English language department at that time, indicated a dissatisfaction of both I language instructors and students concerning the Intensive English Language Course. Language instructors complained of inadequacy of the course specification content and the big number of assigned books. They were unable

to teach the six prescribed books within the assigned time (12 weeks). In addition, since the language instructors were graduates of the Faculty of Arts and they did not have any educational background concerning course design nor did they receive any training in such areas, they were unable to select, sequence or present the topics from the six books in a suitable way that satisfies students and the course seemed fragmentary.

Students, on the other hand, were dissatisfied with both quantity and quality of the taught content. They also reported that the course was not useful for them since they did not perceive how this course related to their academic or professional needs. In brief, the result of teaching this Intensive English Language Course was boring lessons, unsystematic teaching, sometimes frustrated and provocative students.

This study was an attempt to address this problem. It aimed at using the participatory approach for analyzing students' needs and designing an ESP course for the Life Sciences students at the Faculty of Science and Arts in Dhahran Al-Janoub, King Khaled University (KKU), Saudi Arabia. The study also aimed at investigating the effectiveness of the ESP course in enhancing the students' English language learning and their satisfaction with the ESP course.

Problem of the study

The problem of this study is identified in the absence of an ESP course that meets the needs of the Life Sciences students at the Faculty of Sciences and Arts in Dhahran Aljanoub, KKU, Saudi Arabia.

Questions of the study
This study was an attempt to answer the following questions:

1. What are the needs of the students at the Life Sciences Section at the Faculty of Science and Arts in Dahran Al-Janoub, KKU, Saudi Arabia as analyzed by the participatory approach?

2. How can the participatory approach be used to design an ESP course that addresses the needs of the students at the Life Sciences Section at the Faculty of Science and Arts in Dahran Al-Janoub, KKU, Saudi Arabia?

3. What is the ESP course that meets the needs of the students at the Life Sciences Section at the Faculty of Science and Arts in Dahran Al-Janoub, KKU, Saudi Arabia?

4. What is the effect of the ESP course on the enhancement of the English language learning of the students at the Life Sciences Section at the Faculty of Science and Arts in Dahran Al-Janoub, KKU, Saudi Arabia?

5. To what extent are the students at the Life Sciences Section at the Faculty of Science and Arts in Dahran Al-Janoub, KKU, Saudi Arabia satisfied with the ESP course?

Review of literature

ESP arose as a term in the 1960's as course designers became increasingly aware that general English courses frequently did not meet learners' or employers' needs (Brunton,2009). Bojović (2006) explained that ESP grow out of a number of converging trends: 1) the expansion of demand for English to suit specific needs of a profession, 2) developments in the field of linguistics in which attention shifted from defining formal language features to discovering the ways in which language is used in real communication, causing the need for the development of English courses for specific group of learners, and 3) educational psychology which pinpointed that learner's needs and interests have an influence on their motivation and effectiveness of their learning.

ESP material should be authentic, up to date and relevant for the students' specializations (Bojovic (2006). The debate of authenticity in ESP has its rational. Since ESP instructors should think of the learners needs throughout the materials' production, of course, this will not happen if materials are general English, or the course is ready-made. Using a readymade course book is against the learning centeredness which is a main principle in ESP. Recently, new debate has arisen as to the authenticity of materials within ESP. This idea is supported by studies in the ESP area. Razmjoo and Raissi (2010) reported a dissatisfaction of instructors and students concerning the ESP textbooks used with medical students. On the other hand, results of Sabet and Daneshvar (2010) revealed that participants' reading

comprehension scores were higher in the group taught with teacher-made materials. Harabi (2010) found that although learners at the Higher Institute of Commerce of Sousse were motivated to learning English, these learners regarded the teaching of ESP in the higher education as not motivating.

The extent to which an ESP course should be narrow-focused or wide-focused is debatable. Based on review of literature, Brunton (2009) reported that students were very happy with a narrow focus course as they felt no time was wasted during their course. On the other hand, knowing the restrictive language of their target situation would not enable them to function outside of that narrow context.

The ESP teacher has different roles beside teaching. Literature in the ESP field uses the term 'practitioner' rather than 'teacher' to emphasize this idea. The relation is much more a partnership . ESP teachers are not specialists *in the field,* but in teaching English, their subject is English for the profession but not the profession in English. They help students, who know their subject better than the teachers do, develop the essential skills in understanding, using, and/or presenting authentic information in their profession. ESP teachers simply bring the necessary tools, frameworks, and principles of course design to apply them to new material. (Bojović, 2006).

As needs analysis is one of the important aspects of ESP, a group of students focused on analyzing learners' needs. Kaur and Clarke(2009) identified the English language skills of the Human Resource staff and explored the differences between the expected English language skills and the actual performance of the Human Resource staff at the workplace. The study revealed that there were differences between the expected English language skills and the actual performance of the Human Resource staff. Rahman et al. (2008) investigated language needs to develop an ESP speaking course framework for the foreign postgraduates in the fields of Science and Technology of three faculties at National University of Malaysia. Stapa and Jais (2005) investigated the needs and expectations of the Tourism and Managements students with regards to the writing courses offered in three colleges in Malaysia.

Some studies aimed at designing ESP courses and/ or determining their effect on different variables. Adopting an integrated skills, multi-dimensional approach, Coskun (2009) developed a course for second-grade tourism students at a vocational school in Turkey. Based on students' needs. Chen, Belkada and Okamoto (2004) investigated the learning effectiveness of a Web-based course, Academic English for Japanese learners of English. In Horst, Cobb and Nicolae (2005), university students used a set of existing and purpose-built on-line tools for vocabulary learning in an experimental ESL course. The resources included concordance, dictionary, cloze-builder, hypertext, and a database with interactive self-quizzing feature. Regression analyses investigated connections between use of specific computer tools and gains. Using semi-structured interview, Xenodohidis (2009) developed an ESP course for students of Computing in Institutes of Vocational Training in Greece. Sabet and Daneshvar (2010) found out that medical students taught with teacher-made materials scored higher in reading comprehension than students taught in international or domestic material. Chen (2006) designed an ESP program for learners of various disciplines within a Chinese industrial institution. Baleghizadeh and Oladrostam (2010) used video to promote vocabulary knowledge of law students. Tsai (2012) integrated ESP multimedia courseware for semiconductor technology into instruction of three different language programs in higher education. Results of the study indicated that students in all three programs benefited from the courseware integration and were satisfied with practices for learning professional knowledge and English skills provided by the courseware.

Another trend of studies in the ESP field was materials' development or evaluation. Alduais (2012) analyzed and evaluated the book Basic English for Computing and determined its suitability for use in Saudi and Yemeni universities. Results showed that the book had a high standard design and format as an ESP curriculum. However. It didn't suit the level of ESP learners in both public and private Yemeni Universities. Chowdhury and Haider (2012) evaluated EAP courses for the Pharmacy students in the University of Asia Pacific, Bangladesh based on needs analysis. Results indicated that the EAP Pharmacy courses did not meet the learners' needs. Razmjoo and

Raissi (2010) evaluated the ESP textbooks used for Medical students available in The Center for Studying and Compiling University Books in Humanities (SAMT). Results indicated that instructors and students were not satisfied with most of the criteria which the SAMT ESP textbooks should fulfill.

Some studies used different tools to explore attitudes, opinions, challenges, problems, satisfaction, etc. of different ESP groups of learners. Katsara (2008) used focus group to survey students views of the ESP course in University. Using a questionnaire and an interview, Harrabi (2010) explored the attitudes of both ESP teachers and learners at Higher Institute of Commerce of Sousse, Tunisia in an attempt to describe the educational situation there. In addition, Brunton (2009) investigated hotel employees' attitudes in an 8-week course of English studies.

Using interviews, Al-Khasawneh (2010) investigated the academic writing problems of the Arab postgraduate students of the College of Business at Utara University, Malaysia and provided solutions for them. Furthermore, Kavaliauskienė and Anusienė (2010) analyzed learners' attitudes to using weblogs and wikis for ESP writing. Results indicated that the experience of online writing for the audience provided an important opportunity for improving writing skills. Myles (2009) investigated the challenges that ESL engineering students have in acquiring oral competency, including computer-mediated communication, while on their full time work placements in Canada.

Kavaliauskienė and Anusienė (2009) investigated perceptions of online listening to podcasts among students of different specializations who study English for Specific Purposes at the Faculty of Social Policy, Mykolas Romeris University, Lithuania. Results indicated that podcasts were effective in developing students' listening skills and that they perceived them positively. Kavaliauskienė and Kaminskienė (2010) investigated learners' perceptions of employing electronic language portfolios for conducting various assignments in English for Specific Purposes classes. The results showed that students were positive about application of ICT in ESP classes. Writing e-entries encouraged students' critical thinking, developed their creativity,

motivated learners to use digital technology and encouraged collaboration of learners.

Some studies investigated the effect of using strategies, approaches or techniques on different variables related to ESP students. Kavaliauskienė and Darginavičienė (2009) investigated the effect of using dictation techniques with Psychology and Law students at the tertiary level. Results indicated improvement in students' listening, writing and other areas. Moghadam (2008) evaluated the effects of explicit training of a selected number of cognitive reading strategies on students' comprehension of ESP texts. Participants in the experimental group outperformed the control group in terms of comprehension of ESP reading texts. *Jund (2010)* explored the "culture talk" of international students in a university English for academic purposes (EAP) course.

The Participatory Approach

Participatory methodologies have arisen from qualitative research approaches which aim to reflect, explore and disseminate the views, concerns, feelings and experiences of research participants from their own perspectives (Zarb, 1992 cited in French and Swain, 2004:2). Woodman and Taylor (2007:2) explained that there is no agreed upon definition of participatory approaches. However, several features distinguish them from non-participatory approaches. These include "shared ownership and analysis of the research question, and a commitment to social, economic and political change responsive to the needs and opinions of participants". The realization of participatory research goes beyond this, however, to engage participants in the design, conduct and evaluation of research, with the construction of non-hierarchical research relations. The general change in terminology from 'research subjects' to 'research participants' is indicative of the influence of participatory approaches (French and Swain,2004). The participatory approaches are based on shared ownership of decision-making. This approach is a response to 'top-down' approaches to development, in which power and decision-making is largely in the hands of external development professionals.

The participatory approaches invite the engagement of all stakeholders, ideally at all stages of the educational process,

including construction of curriculum, selection of research topics, inquiry, and assessment of inquiry outcomes (Ferrer, Romero, and Albareda, 2007:4). In this study, the participatory approach to course design is defined as " a cooperative process in which the stakeholders (the students, the subject matter specialists and the language instructors) participate in identifying learners' needs, developing course objectives, content and evaluating the course.

Sohang (n.d.) emphasized the importance of using a participatory approach for research that is not done just to generate facts, but to develop understanding of oneself and one's context. It is about understanding how to learn, which allows people to become self-sufficient learners and evaluate knowledge that others generate. Good participatory research helps develop relationships of solidarity by bringing people together to collectively research, study, learn, and then act. There is no off-the-shelf formula, step-by-step method, or 'correct" way to do participatory research. Rather, participatory methodology is best described as a set of principles and a process of engagement in the inquiry. In this approach, both the researcher and the participants are actors in the investigative process, influencing the flow, interpreting the content, and sharing options for action.

According to French and Swain (2004) and Neiland, Bennett and Townsley (2005), participatory research aims to involve, at every stage of the research process (choice of topics, methods, evaluation and dissemination), those towards whom research is normally directed. There is no place for 'subjects' or passive co-operation in this approach. Instead, everyone involved is an active participant. Ideally, the expertise and talents of everyone are utilized to the full and training is given if necessary. The approach does not, however, reject expert knowledge or help from outside, rather it aims to make traditional research more effective and more meaningful.

Crowder (1997) pinpointed that the participatory approach emphasizes a participatory mode of action based on an inventory of stakeholder groups and the nature of their interests, and in an interactive manner that elicits their input to the curriculum (e.g., through interviews, consultations, post-hoc evaluations). This process can be guided by outside curriculum development "experts" or staff internal to the educational institution.

According to Sohng (n.d.), a key methodological feature that distinguishes participatory research from other social research is dialogue. Through dialogue, people come together and participate in all crucial aspects of investigation, education and collective action. It is through talking to one another and doing things together that people get connected, and this connectedness leads to shared meaning. Dialogue encourages people to voice their perspectives and experiences, helping them to look at the "whys" of their lives, inviting them to critically examine the sources and implications of their own knowledge. In this context, dialogue allows to awaken participants' voices and cultivates their participation as critical, active agents of change. The role of the researcher in this process is a facilitator of the learning process. The researcher is not an expert who is assumed to have all the knowledge and gives it to the people who are assumed not to have any knowledge. Rather, it is a facilitator who sets up situations that allow people to discover for themselves what they already know along with gaining for themselves new knowledge. In this process, the researcher not only learns from the participants, but also engages in dialogue by posing questions. It is worth noting that the teacher's role in the participatory approaches, as a facilitator not an expert, is similar to that in ESP.

According to Newman (2001) the advantages of the participatory approaches are: (1) they use inexpensive resources; (2) they can be used in any physical setting; (3) they are interesting and fun, helping to involve people in the process; (4) they help people to build self-confidence; (5) they help people to learn about themselves, and (6) they can help people to analyze complex situations. In addition, they help people to understand the perspectives of others and the participants with different degrees of experience and literacy can use them. Besides, in the participatory approaches to research, outcomes are often documented during the process and do not depend on jargon.

However, the participatory approaches have some disadvantages. Newman (2001) mentioned that:

- They are difficult to plan, because planning often depends on what the participants want to do.

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- Involving stakeholders takes time.
- It can take time for people who are used to being "students" rather than "participants" to feel comfortable with these approaches.
- Facilitator techniques can be difficult to master and use effectively.
- They can be difficult to document in a report format but can be documented well using photographs or by keeping flipcharts.
- Some people may not consider them to be valid ways of working.
- Participants may be more focused on the creative, rather than learning, aspect of the activity.
- It can be difficult to establish clear action points or conclusions from the activity.

Numerous studies and evaluations were made on various participatory/ bottom-up approaches. Many studies used the participatory approach in the field of education. Ahluwalia and Aggarwal (2010) reported a study in which learner-centered internet –based projects were used with engineering students. Students determined the topics, reading materials, and the way they want to use while exploring the readings themselves. They decided on the process and the product, formulated the goals, identified Internet-based resources, and made a decision on how the outcomes should be evaluated. Bensona, Samarawickrema and O'Connell (2009) used the participatory approach to evaluate an academic professional development resource designed to support e-learning and teaching at Monash University, Australia. Bilal (2002) involved eleven seventh grade children in designing interfaces for Web search engines that met their needs using the participatory approach. Brady (2007) used the participatory approach in a children's IT project in Galway City, Ireland. The children's IT and social skills developed as a result of the participatory approach. Bruch and Reynolds (2012) used the participatory approach to assess a program assessment. The approach was successful in identifying the weaknesses and strengths of the program Conole et al. (2010) used the

participatory design approach to develop inquiry based learning technology toolkit. Domínguez (2006) used participatory activities with second year Socio-cultural students at the University of Guantánamo, Cuba. The students appreciated and welcomed the activities and adapted some of them. Ferrer, Romero, and Albareda (2007) introduced a participatory approach to integral education. Neiland, Bennett and Townsley (2005) conducted a mata-analysis of studies on participatory research in the period between 1995 and 2005.Peter (2003) used the participatory approach to assess the impact of total immersion on Cherokee language revitalization. Pohl et.al (2008) used the participatory approach for designing game-based learning. Rizk (2009) used a participatory approach to plan a program for adult literacy organization. Wiggins (2004) used the participatory approach to curriculum development, implementation and exploration of the effectiveness of a guidebook for teaching community adult ESL. Woodman and Taylor (2007) explored the challenge of participatory approaches to large-numbers longitudinal research.

Method

Participants

Sixty students who attended the Intensive English Language Course in the first term of the academic year 2012/ 2013 served as the main participants of the present study.

Setting

The Intensive English Language course started at the beginning of the first term of the academic year 2012/ 2013. It took place trice a week , an hour- per session. The course lasted for 12 weeks. This made a 36 –teaching hours course. The attendance was compulsory and missing of more than 25% of the course duration meant a drop out at the course. Teaching took place in a class where facilities such as a lap top, a data projector and over-head projector could be easily accessed. Seating system was easily changed for the convenience of using pair and group work.

Tools of the study

Needs Analysis Questionnaire (NAQ)

To answer the first question of the study, a Needs Analysis Questionnaire (NAQ) (Appendix 1) was designed by the

researcher in order to identify the needs of Life Sciences students at the Sciences and Arts Faculty in Dhahran Aljanoub, Saudi Arabia. The questionnaire was designed in two versions; the first was for analyzing learners' needs from learners' point of view and the other was from their subject matter instructors'. The questionnaire got information concerning: (a) importance of the four language skills for the students during study and after graduation, (b) difficulties students expected to face when using any of the four language skills or language areas, grammar and vocabulary, (c) the type of materials they were expected to use during their study, and (d) situations in which they were expected to use English. The NAQ was submitted to 60 students enrolled in Level 1 at the Life Sciences Section in the Faculty of Sciences and Arts Dhahran Aljanoub by the end of the first term of the academic year 2011/ 2012. Twelve subject matter specialists teaching the Life Sciences students responded to the NAQ, instructors' version.

The pre-post test

To answer the fourth question of the study, a pre-post English language test was prepared. The pre-post test (Appendix 2) aimed at finding out to what extent the EAP course enhanced the English language learning of the students in the Life Sciences Section at the Faculty of Science at Dahran Al-Janoub, KKU, Saudi Arabia. The six English language instructors teaching English at Dhahran Aljanoub Faculty of Sciences and Arts participated in the pre-post test construction during the third participatory session. The test included items that assessed listening (10 items), speaking (3 items), reading (10 items), writing (definition writing, 2 items, and paragraph writing), vocabulary (10 items), grammar (8 items) and interpreting graphs (5 items). Thus, the whole test included 48 items in addition to paragraph writing. Each item of the test was given one score except for paragraph writing which was given five scores.

Participation of the six English language instructors was considered jury validity. In addition, the test was administered to a sample of 35 students during the second term of the academic year 2011/ 2012 for assessing reliability. Statistical Package for Social Sciences (SPSS) program was used for the statistical analysis. Results of the statistical analysis revealed that Guttman

Split-Half Coefficient was .776 where Spearman Brown Coefficient and Alpha Cronback Coefficients reached .98 which show test high reliability. The test took 120 minutes to complete. The test was administered to the participants of the study (n=60) before and after teaching the ESP course during the first term of the academic year 2012/ 2013.

The course satisfaction questionnaire

To answer the fifth question of the study, a course satisfaction questionnaire (Appendix 3) was designed by the focus group of stakeholders. The questionnaire consisted of 20 items assessing students' satisfaction concerning meeting students' needs and expectations, relevancy and usefulness of course content and activities to the students' study, appropriateness of the course linguistic level to the students' language level, clarity and validity of information, effectiveness of course in developing students' knowledge, language skills, adequacy of activities and feedback and course duration; and suitability of the teaching methods and techniques. The course satisfaction questionnaire was administered to the participants of the study (n=60) after finishing studying the ESP course.

The participatory sessions for the ESP course design

Participatory design means active involvement of research participants in the whole design process. In this study the learners themselves and their subject matter specialists and English language instructors participated in the ESP course design. Adopting a participatory approach to the design of an ESP course is not an easy task. According to Taylor (2001), the more stakeholders are involved, the greater is the potential for complexity and misunderstanding. Therefore, all research participants were represented in the process of ESP course design but the number of participants representing each stakeholder was kept to a minimum in an attempt to facilitate the participatory process. Three participatory sessions (Appendix 4) were conducted; the first was for all stakeholders to identify learners' needs, agree on topics, select materials and sequence them; the second was for the English language instructors where the activities based on the selected materials were developed and the pre-post test was constructed, and the third was for all

stakeholders where the course was evaluated in the light of agreed upon criteria. The following procedures were followed in designing the ESP course:

- Forming a focus group of stakeholders. The focus group included six students, six subject matter specialists teaching them and six English language instructors.
- Familiarizing the focus group with:
    o The participatory approach and its rationale.
    o ESP.
    o Course design.
- Presenting the qualitative results of students' needs analysis.
- Discussing the discrepancy between the students' perceptions and those of the subject matter specialists. Explanations were given from both sides till a consensus was reached concerning the students' needs.
- Identifying aims and objectives of the course in the light of the students' needs.
- Selecting materials and developing activities that met the objectives.
- Agreeing on course evaluation criteria.
- Designing the ESP course.
- Sequencing and organization of content and activities.
- Evaluating the course.
- Designing the pre-post test.

It was evident across the sessions that although the process of the participatory course design is difficult but it deserves trial. The process involved a co-construction of ideas between students and instructors which lead to a feeling of satisfaction from the part of students and a feeling of more understanding of students and their needs from the part of the instructors. The process necessitated negation of ideas till a decision was reached. Thus this section answers the second question of the study which dealt with the use of the participatory approach in ESP course design.

The ESP course

This section answers the third question of the study which dealt with the ESP course. Passing through the aforementioned steps of participatory course design, the ESP course (Appendix 5), in its final form, consisted of five units. The course aimed at developing the students' English language skills with more emphasis on reading and writing. Grammar, scientific vocabulary and interpreting tables, graphs and diagrams were also included. Listening and speaking received less emphasis. Teaching the course necessitated 36 teaching hours, seven per-unit, with an extra orientation hour for familiarizing students with the course, its objectives, assignments and students' role.

The course aimed at developing the Life Sciences' students':

1. Reading comprehension skills.
2. Paragraph writing.
3. Definition writing.
4. Interpretation of tables, graphs and diagrams.
5. Listening to lectures with comprehension.
6. Taking notes from a lecture.
7. Speaking (making introductions, taking and giving permission, and asking for clarification).
8. Knowledge of scientific vocabulary.
9. Knowledge of grammar.

The course was taught by the researcher to all the Life Sciences students (n=60) registered in the Intensive English Language Course during the first term of the academic year 2012/ 2013.

Results and interpretation

Results of students' needs analysis

The first aim of this study was to identify the learners' needs since they are the basis upon which ESP courses are designed. In this study, the participatory approach was used to analyze students' needs. Since, both students and subject matter specialists participated in the needs analysis process, this part dealt with the

results of the needs analysis from both the students and their subject matter specialists' points of view. Table 1 summarizes their responses concerning the English language skills that the Life Sciences' students need for their study and after graduation.

Table 1: Importance of the four language skills to the Life Sciences students

		Before graduation										After graduation											
		Very important		Important		Moderate		Low importance		Not important		Very important		Important		Moderate		Low importance		Not important			
		no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
Listening	Ss	5	8.33%	10	16.6%6	25	41.66%	10	16.66%	10	16.66%	-	-	-	-	-	-	-	-	-	-	60	100%
	SM	-	-	-	-	4	33.33%	8	66.66%	-	-	-	-	-	-	-	-	-	-	-	-	12	100%
Speaking	Ss	5	8.33%	10	16.6%6	25	41.66%	10	16.66%	10	16.66%	-	-	-	-	-	-	-	-	-	-	60	100%
	SM					4	33.33%	8	66.66%			-	-	-	-	-	-	-	-	-	-	12	100%
Reading	Ss	30	50%	20	33.33%	10	16.66%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	100%
	SM	6	66.66%	4	33.33%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	100%
Writing	Ss	10	16.66%	40	66.66%	10	16.66%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	100%
	SM			8	66.66%	4	33.33%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	100%

It is evident that all the students and the subject matter specialists strongly agreed that the Life Sciences graduates did not need English after graduation at all. During the participatory sessions, both were asked about a clarification of this result. They explained that all female graduates from the Life Sciences Section work as school teachers where they do not use any of the English language skills. Consequently, the course was decided to be an EAP course.

Concerning the perception of the EAP linguistic needs, both students and subject matter specialists viewed reading as the most important skill for the Life Sciences students followed by writing. Thirty students (50%) and eight subject matter specialists (66.66%) viewed reading to be highly needed. Besides, 16.66% perceived writing to be very highly needed and 66.66% perceived

it to be highly needed. Subject matter specialists (66.66%) also viewed writing to be of high need to the students.

On the other hand, perception of the need of listening and speaking differed from the students to the subject matter specialists. Whereas eight subject matter specialists (66.66%) viewed listening and speaking to be of low importance to the students, five students (8.33%) perceived it as highly important, 10 (16.6%6) as important and 25 (41.66%) as moderately important. This discrepancy was discussed during the participatory sessions. Subject matter specialists explained that lectures were mainly given in Arabic with terminology only given in English. Students, on the other hand, explained that they need listening and speaking when dealing with non-native speakers of Arabic teaching them. In fact, sometimes students were taught by Hindi or Pakistani subject matter specialists who used English as a medium of instruction. Although this rarely happened, this situation stressed the students and posed questions concerning their success in interacting with an English speaking instructor and their ability to understand the course and pass it. Therefore, it could be concluded that reading and writing were the most important skills for the Life Sciences students while listening and speaking were of low importance to them. This result is inconsistent with Coskun (2009) who found out that listening and speaking were the most needed skills for the tourism students, and Stapa and Jais (2005) whose students needed only writing for occupational purposes.

Review of literature shows that students sometimes express wants than needs. Students in this study were able to express real needs not wants. This may be due to the fact that the needs analysis questionnaire was administered to a sample of students who experienced an English language course that did not meet their needs. In addition, it was administered to them after studying a whole semester in the Life Sciences Section. Thus, their opinions in the needs analysis questionnaire were based on a real experience with non-ESP courses and the nature of studying in the specialization.

Difficulties faced with language skills and areas
Table 2 presents information concerning the difficulties that the Life Sciences students in Dhahran Aljanoub Faculty of Sciences and Arts faced when using the English language skills, vocabulary and grammar.

Table 2: The language difficulties faced by the Life Sciences students during their study

		Very often		Often		Sometimes		Rarely		Never	
		No.	%	No.	%	No.	%	No.	%	No.	%
Listening	Ss	50	83.33%	10	16.66%						
	SMSs	5	41.66%	5	41.66%	2	16.66%				
Speaking	Ss	50	83.33%	10	16.66%						
	SMSs	5	41.66%	7	58.33%						
Reading	Ss	15	25%	30	50%	15	25%				
	SMSs	4	33.33%	3	25%	5	41.66%				
Writing	Ss	13	21.66%	14	23.33%	15	25%	18	30%	2	16.66%
	SMSs	4	33.33%	4	33.33%	4	33.33%				
Scientific vocabulary	Ss	5	8.33%	12	20%	27	45%	14	23.33%	2	16.66%
	SMSs	2	16.66%	2	16.66%	5	41.66%	3	25%		
Grammar	Ss	6	10%	6	10%	22	36.66%	18	30%	8	2.22%

Table 2 indicates that the life Science students faced difficulties very often (83.33%) and often (16.66%) with the listening and speaking skills. This result was consistent with the subject matter specialists' point of view who also viewed listening (very often= 41.66%, often =41.66%) and speaking (very often= 41.66%, often= 58.33%) to be problematic to their students. The fact that the subject matter specialists viewed listening and speaking to be of low importance to the students urged the researcher to clarify their responses to this section during the participatory sessions. Subject matter specialists explained that their students, in general, did not need listening and speaking skills during their study in the faculty if they were taught by Arabic speaking instructors. This is because lectures were usually given in a mixture of Arabic and English. In other words, translation and keeping the use of English to the minimum use of scientific English did not annoy the students at all. When a non-native of Arabic instructor taught those students, which was very common in the Saudi context, the need for listening and speaking in English arose and the students faced difficulties in using them.

Reading and writing were less problematic to the students from both students' and subject matter specialists' point of view. Reading was perceived by the students to be more problematic than writing. 50% of the students reported that they often faced difficulty in reading while 25% reported it to be very often. The students reported facing less difficulty while writing in English. This result was contrary to the subject matter specialist' view concerning the difficulty of reading (very often =33.33% ; often= 25% and sometimes=41.66%) and writing (very often =33.33% ;

often= 33.33% and sometimes=33.33%). While the subject matter specialists reported that students faced difficulty in both skills, they viewed writing problems to be faced more often than reading. When asked for rationale behind their responses during the participatory sessions, students reported that they find reading textbooks and, sometimes articles from internet websites, very difficult to understand. On the other hand, they are allowed to resort to Arabic vocabulary while answering exam questions. Score is given based on content of the answers regardless of mistakes in grammar, spelling, punctuation, etc. Therefore, they perceive reading to be more problematic than writing.

Subject matter specialists supported the students' answers but emphasized that the problem sometimes lied in the students' inability to express what they know in English even if they resort to using some Arabic vocabulary. They explained that students needed to know how to organize and present ideas in a logical way.

Concerning vocabulary, both students (45%) and subject matter specialists (41.66%) agreed that students sometimes face difficulty in knowing and using scientific vocabulary. Both explained that although students faced this difficulty at the beginning of the course, once they started to be familiar with the different courses they study, the difficulty started to diminish. With reference to grammar, both students (36.66%) and subject matter specialists (50%) agreed that students sometimes face difficulty in using grammar correctly. Although most of the students were familiar with the English grammatical rules through their study at the secondary stage, they faced difficulty to use these grammatical rules correctly while writing. In addition, they found difficulty using the grammatical rules in scientific writing. Subject matter specialists pinpointed, during the discussion in the participatory sessions, that knowledge of the grammatical rules was not enough, use of these rules in writing was of great importance to those students. They gave an example that tenses such as the present perfect tense was of great importance for expressing facts, and that the passive voice was also frequently used in scientific writing.

Material students were expected to use during their study
Table 3 presents information concerning the materials students were expected to read during their study in the faculty.

Table 3: Materials students were expected to read during their study

Material	Students' response		Subject matter specialists' response	
	No.	%	No.	%
Textbooks	60	100%	12	100%
Periodicals/ journal articles	0	0	0	0
Material from the internet	40	66.66%	6	50%
Notes	60	100%	10	83.33%
Lab reports	60	100%	12	100%
Others: References			4	33.33%

Table 3 shows that the Life Sciences students were expected mainly to read textbooks, notes and lab reports since all of the students and the subject matter specialists agreed on this. Most of the students (66.66%) and some subject matter specialists (50%) reported that students may need to read materials from the internet. On the other hand, students were never asked during their study in the faculty to read periodicals or journals. Some subject matter specialists (33.33%) added that some students needed to read references when asked to make research on any of the topics in their study.

Situations in which students were expected to use English
Table 4 presents data on the situations in which students were expected to use English during their study.

Table 4: Situations in which students are expected to use English

	No.	%	Order
Listening to lectures in English.	25	41.66%	6
Taking notes during lectures	45	75%	3
Interacting with instructors during lectures (asking for repetitions, clarifications, asking questions, taking permission, ...)	32	53.33%	5
Reading for understanding	60	100%	1
Make presentations.	10	16.66%	7
Answering test questions.	30	50%	6
Talking with a non-native speaker of Arabic at job after graduation.	0	0%	0
Write report on a lab experiment.	30	50%	6
Writing definitions.	40	66.66%	4
Interpreting tables,graphs and diagrams.	40	66.66%	4
Understanding the main points of text.	55	91.66%	2
Skim a text to get a general idea of the content.	45	75%	3
Reading a text in order to understand the details.	55	91.66%	2
Scan a text in order to locate specific information	55	91.66%	2
Guessing unknown words from context.	60	100%	1
Understanding text organization	30	50%	6
Understanding specialist vocabulary in a text	55	91.66%	2

Table 4 shows that all students (100%) agreed that they were expected to use English for reading for understanding and guessing unknown words from context. Most of the students (91.66%) agreed that they were expected to use English for: (1) understanding the main points of text, (2) reading a text in order to understand the details, (3) scanning a text in order to locate specific information and (4) understanding specialist vocabulary in a text. Taking notes during lectures and reading the text quickly to get a general idea of the content was agreed upon by 75% of the students. In addition, 66.66% of the students expected to write definitions in English and interpret graphs and diagrams. Interacting with instructors during lectures (taking permission, asking for repetitions, clarifications, asking questions,) was agreed upon by 53.33% of the students. The other situations were agreed upon by 50% or less of the students. The course included those that received more than 50% of students' agreement.

Results of the effect of the ESP course in enhancing the students' English language learning

This study aimed at designing an EAP course for the Life Sciences students at the Faculty of Sciences and Arts in Dhahran Aljanoub, Saudi Arabia, in the light of their needs. The study also aimed at investigating the effect of the course on enhancing the students' English language learning which is the focus of the fourth question of the study. Paired samples t-test was used to find out if there was a statistical significant difference at the 0.05 level between the mean scores of the Life Sciences' students in the pre-post English language test. Results are presented in Table 5.Table 5 shows that there was a statistically significant difference between the students' mean scores on the English language pre-post test at the 0.001 in favor of the post test. For more in-depth analysis, the power of

Table5 : Difference in the mean scores of the students' pre-post English language test

Test	mean	N.	Std. Deviation	Std Error Mean	Paired differences					t-value	df	Sig. (2-tailed
					Mean	Std.Deviation	Std Error Mean	95% Confidence interval of the difference				
								Lower	Upper			
Pre-	6.56	58	3.52	.462	-31.948	8.01	1.052			-30.36	57	.000
Post-	38.51	58	7.406	.972				-34.055	-029.84			

using η^2. Table 6 presents data on this respect.

Table 6 : Effect size of using the ESP course using η2

t-value	df	η^2	Effect size
30.36	57	.9417	94%

 Table 6 shows that the effect size of using the ESP course for enhancing the Life Science students' English language was 94% which is, according to Abou-Hatab and Sadek, very high since it was more than 14%.

This result is consistent with the previous studies (Baleghizadeh and Oladrostam, 2010; Chen, Belkada and Toshio, 2004; Chen, 2006; Coskun, 2009;; Horst, Cobb and Nicolae , 2005; Kavaliauskienė and Darginavičienė, 2009; Moghadam , 2008; Sabet and Daneshvar, 2010; Tsai, 2012; Xenodohidis , 2009;) which revealed that courses tailored to meet the students specific needs enhanced students' learning.

Enhancement of the students' language level may be attributed to different reasons. First, this study combined two important factors that were assumed to positively enhance students' learning: a tailor-made ESP course that is based on needs analysis and the participatory approach to ESP course design. Using students' needs as the basis upon which the course was designed brought about a course that met the learners' needs and expectations. Second, since the course was narrow-focus, it was directed towards their exact needs and students felt that no time was wasted in something of no value to them.

Besides, students' participation in the process of needs analysis and negotiation of needs with the researcher and the subject matter specialists brought about a deep and correct analysis of needs. The cooperation and active participation of the researcher, the subject matter specialists, the English language teachers and students in the process of course design, brought about a product, the ESP course, that, according to Baleghizadeh and Oladrostam (2010), enjoyed a higher quality for the target students. Agreeing with Sohng (n.d.) and Neiland, Bennett and Townsley (2005) using the participatory approach was not only for generating ideas, but also for developing understanding of oneself and one's context. The participatory approach helped

understanding how those learners learn, their problems, preferences and expectations. It created a dialogue between the researcher, who acted as a facilitator to encourage discussion and decision making, and all participants who served, in a way or another, as experts who explored together the students' situation, their real needs, problems, and expectations.

This result is consistent with Brady (2007) whose children information technology and social skills improved as a result of the participatory approach. It is also consistent with **Bruch and Reynolds (2012)** concerning the success of the participatory approach in identifying the weaknesses and strengths of the program.

Results of the Life Science students' satisfaction with the ESP course

Table 7 presents results of the Life Sciences' students' satisfaction with the EAP course in terms of frequencies and percentages
Table 7 shows that most of the students were very satisfied with the EAP course. Their answers usually ranged from strongly agree to agree. Most students, 83.3%, strongly agreed and 16.6% agreed that the ESP course met their needs. Besides, 75% strongly agreed that the course met their expectations while 16.6 % agreed and 8.3% were undecided. Concerning relevancy of the course to the students' study, 90% of the students strongly agreed while 10% agreed. The course was appropriate to the students' level as 66.6% strongly agreed, 13.3% agreed, 5% were undecided and 13.3% did not agree. Most of the students, 83.3%, strongly agreed and 16.6% agreed that the course content was useful to them. Furthermore, the course helped students acquire more knowledge (91.6% strongly agreed and 8.3% agreed). Most students, 75%) strongly agreed that the information presented was clear and valid and 25% agreed. All students strongly agreed that the course helped them develop their language skills. Most students (80%) strongly agreed that the activities in the course were useful, 16.6% agreed and 3.3%c were not sure. The majority of the students (91.6%) strongly agreed that the activities helped them cooperate with their colleagues, encouraged participation and engagement in the tasks and 8.3% agreed. Most students (85%) strongly agreed and

Table7 : Results of the Life Science students' satisfaction with the course

Item	Completely agree		Agree		Undecided		Disagree		Completely disagree	
	No.	%	No.	%	No.	%	No.	%	No	%
1. The course meets my needs.	50	83.3%	10	16.6%						
2. The course meets my expectations.	45	75%	10	16.6%	5	8.3%				
3. The course is relevant to my study.	54	90%	6	10%						
4. The course is appropriate to my linguistic level.	40	66.6%	8	13.3%	3	5%	8	13.3%		
5. The content of the course is useful.	50	83.3%	10	16.6%						
6. The course content helped me acquire new knowledge.	55	91.6%	5	8.3%						
7. The information presented in the course was clear and valid.	45	75%	15	25%						
8. The course content helped me develop my language skills.	60	100%								
9. The activities in the course were useful.	48	80%	10	16.6%	2	3.3%				
10. The activities helped me cooperate with my colleagues.	55	91.6%	5	8.3%						
11. Course activities encouraged participation and engagement in the tasks.	55	91.6%	5	8.3%						
12. The activities were varied and interesting.	51	85%	9	15%						
13. There were enough opportunities for practice in the course.	56	93.3%	4	6.6%						
14. The length of the course was appropriate to cover the content.	30	50%	20	33.3%	10	16.6%				
15. There is a chance to apply the skills I acquired in this course.	44	73.3%	10	16.6%	3	5%	3	5%		
16. The teaching methods/ techniques used in teaching the course were appropriate.	50	83.3%	10	16.6%						
17. Working individually, in pairs and groups helped me develop my English language skills.	45	75%	10	16.6%	5	8.3%				
18. Aids used for teaching the course were appropriate.	55	91.6%	5	8.3%						
19. I got enough feedback on my work during the course.	43	71.6%	8	13.3%			9	15%		
20. The course as a whole is good.	47	78.3%	13	21.6%						

15% agreed that the activities were varied and interesting. There were enough opportunities for practice in the course as 93.3% strongly agreed and 6.6% agreed on that item. Half of the students strongly agreed and 33.35 agreed that the length of the course was appropriate to cover the content while 16.6% were undecided.

In addition, a great number of students (73.3%) strongly agreed that the skills they acquired from the course were applicable to other situations; 16.6% agreed, 5% were undecided and 5% disagreed. Concerning teaching methods, 83.3% strongly agreed that the methods used in teaching the course were appropriate and 16.6% agreed. The students positively valued the variety of the interaction patterns used in the course. The majority of the student (75%) strongly agreed that individual, pair and group work were useful for the development of their English language level. 16.6% is agreed with this while 8.3% were undecided. The majority of the students (91.6%) strongly agreed that the aids used in the course were appropriate and (8.3%) agreed. Concerning feedback given to the students on their work, most students (71.6%) strongly agreed that they were given enough feedback, 13.3% agreed but 15% disagreed. The course as a whole was evaluated as good since 78.3% of the students strongly agreed and 21.6% agreed.

As the satisfaction questionnaire revealed, using the participatory approach resulted in a course that satisfied the students. This is because in this approach the researcher and all participant were working collaboratively in the investigative process, interpreting data of students' needs, discussing and explaining points of views till reaching consensus, developing course content, and evaluating materials. This means that all stakeholders were involved actively, in agreement with French and Swain (2004), at every stage of the research process.

This result is inconsistent with Stapa and Jais's (2005) study who found out that the Malaysian University courses in Hotel Management and Tourism failed to meet the wants and needs of the students with a lack of skills and genres covered in their courses. The courses were not satisfactory to the students. Results of this study are not consistent with Harabi (2010) whose students did not find the course motivating. Chowdhury and

Haider's (2012) EAP courses for the pharmacy students in the University of Asia Pacific, did not meet the learners' needs either.

Unlike Razmjoo and Raissi (2010) who found out that neither instructors nor students were satisfied with most of the criteria which the medical ESP textbooks should fulfill and Chowdhury and Haider (2012) whose course did not meet their students' needs, students were strongly satisfied with the ESP course in this study. Results of the satisfaction questionnaire are consistent with Kavaliauskienė and Kaminskienė (2010) concerning the positive perceptions of the students concerning ESP. Results are also consistent with Domínguez (2006) concerning students' appreciation of activities designed for them through the participatory approach.

In brief, it can be said that using the participatory approach for ESP course design brought about a course that met the students' needs and enhanced their English language learning. In addition, the students were satisfied with the course.

Implications

This study aimed at designing an ESP course for the Life Sciences students at the Faculty of Sciences and Arts in Dhahran Aljanoub, KKU, Saudi Arabia using the participatory approach. Results of the study were encouraging indicating the effectiveness of the participatory approach in analyzing learners' needs, specifying course goals, topics' selection, materials' development, and course evaluation. The ESP course enhanced the students' English language learning and was satisfying to most of them. It would be beneficial to use the participatory approach to design ESP courses for different disciplines in the colleges of Education, Science, Arts, Medicine, Engineering, etc. Great care should be given to the process of facilitating needs analysis and course design. Opportunities should be given to negotiate and discuss all aspects related to the course. In addition, all stakeholders, including the students themselves, should be actively engaged in the process. This is also useful since literature shows that some ESP students express wants than needs. They are sometimes unable to identify their needs. Attention should be paid to analyzing the students' needs from both the students' and the staff members' points of views are of great importance.

Results of this study have significant implications for practitioners interested in course design. Results show the value of supplementing techniques of learners needs' analysis such as questionnaires, interviews, job analysis, etc. with an approach that deeply analyzes learners' needs from their point of view and all other stakeholders who should be involved in the process of needs analysis. The incorporation of the participatory approach in all stages of course design would ensure a valid, true and deep understanding of the situation. In situations where the use of the participatory approach for course or curriculum design would be difficult, at least it could be used for needs analysis upon which goals, materials, aids and teaching methods/ techniques would be identified.

Needless to say, there were plenty of challenges in implementing the participatory approach. Firstly, the students in this study came from schools and home environments which generally did not encourage them to take a lead, so it was not always easy for them to participate in the discussions. They usually felt afraid to express their ideas freely. However, encouraged by the researcher and the subject matter specialists and the English language instructors, they started to gain self-confidence and express themselves. Secondly, while the participatory approach emphasizes students' needs, the researcher found these needs sometimes were not consistent with their subject matter specialists. This was not because the students were unable to identify their needs or because they expressed wants rather than needs such as what happens with other learners. Rather, this was because the students viewed their needs from a different perspective that their subject matter specialists viewed. The explanations following presentation of each needs was of great value as it lead to students' feeling of satisfaction concerning the agreed upon needs.

The ESP course was taught by the researcher since all the English language instructors teaching in the Faculty of Sciences and Arts at Dhahran Aljanoub were graduates of the Faculty of Arts. They do not have any experience in methods of teaching English and they did not receive any training in ESP or methods of teaching. Agreeing with Harabi (2010), training these teachers would be of paramount importance if we aspire at the success of ESP courses.

ESP courses may be narrow-focus or broad-focus (Brunton, 2009). In this study, the students were satisfied with a narrow focus course that directly dealt with their needs. They felt that their time was not wasted in something they did not need. Researchers and ESP course designers should take into consideration this point in order to design a course that really meets students' needs.

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- أبو حطب، فؤاد و صادق، آمال. (١٩٩١). *مناهج البحث وطرق التحليل الإحصائي في العلوم النفسية والتربوية والإجتماعية*، القاهرة: الأنجلو المصرية.

فعالية مقرر في اللغة الإنجليزية لأغراض متخصصة قائم على المدخل التشاركي في تحسين تعلم طالبات علوم الحياة للغة الإنجليزية ورضاهن عن المقرر

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مستخلص البحث :

استهدفت الدراسة الحالية تصميم مقرر في اللغة الإنجليزية لأغراض متخصصة لطلاب قسم علوم الحياة بكلية العلوم والآداب بظهران الجنوب، جامعة الملك خالد، المملكة العربية السعودية باستخدام المدخل التشاركي وقياس فعاليته في تحسين تعلم اللغة الإنجليزية والرضا عن المقرر لدى الطالبات. تم تحليل احتياجات الطلاب عن طريق استبيان تحليل الاحتياجات الذي طبق على ٦٠ طالبة بقسم علوم الحياة بالكلية بنهاية الفصل الدراسي الأول للعام الجامعي ٢٠١١/ ٢٠١٢ و ١٢ عضو هيئة تدريس من الذين يدرسونهن المواد التخصصية. وأثناء الجلسات التشاركية التي تمت خلال الفصل الدراسي الثاني والتي ضمت ست طالبات و ست من أعضاء هيئة التدريس الذين يدرسون مواد تخصصية للطالبات و ست محاضرات لغة أنجليزية. تم عرض نتائج تحليل الاحتياجات ومناقشتها حتى تم الاتفاق على احتياجات الطالبات. بالإضافة إلى ذلك تم استخدام المدخل التشاركي في تحديد أهداف المقرر وتحديد موضوعاته وتصميم المواد التعليمية والأنشطة المصاحبة، ثم تم تدريس المقرر ببداية العام الجامعي ٢٠١٢ / ٢٠١٣ ل ٦٠ طالبة بقسم علوم الحياة واستمر لمدة فصل دراسي كامل. كشفت نتائج الدراسة عن فعالية المدخل التشاركي في تحسين تعلم الطالبات للغة الإنجليزية. بالإضافة إلى ذلك أشارت النتائج إلى مستوى عال من رضا الطالبات عن المقرر. قدمت التوصيات والمقترحات لبحوث مستقبلية بناء على نتائج الدراسة.

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