JRCIET Vol. 9, No. 2 July 2023

Examining the effectiveness of a Content-Based Instruction Approach on ESP College Students' listening skills, motivation for learning and their Attitudes: A comparative Study in Egypt, KSA & Bahrain

## Dr. Dalia Ali Maher Abbass Mohammed

Associate professor of Curriculum & EFL Instruction – Faculty of Education – Mina University- Egypt

## Dr. Abdul Qader Mohammed Emran

Lecturer of English Language- Teaching Excellence and Technology Centre- Gulf University- Bahrin

## Dr. Rabea Fayez Faheim Ali

Lecturer of English Language Teaching, Department of English Language & Literature · College of Languages & Humanities · Qassim University, Saudi Arabia

## Dr. Shereen Abdelmohsen Abbas Ahmed

*Lecturer of Curriculum & EFL Instruction – Faculty of Education – Assiut University- Egypt* 

## Abstract

This study was conducted in three colleges in Egypt, Saudi Arabia, and Bahrain. It comparatively examined listening skills, motivation for learning and attitudes towards using Content-Based Instruction (CBI) among three student groups in addition to identifying what common needs students in these three colleges had in relation to ESP courses. The study used one group pretest-posttest research design with 124 science major sophomore students enrolled in ESP courses in the three colleges. Instruments of the study encompassed a needs- analysis survey of English language skills, semi-structured interviews, a test of English listening skills, in addition to two scales; a scale of motivation for learning, and an attitude scale towards CBI. The results demonstrated that there are statistically significant differences between the

averages of the three groups in the dimensional administration of the listening test, and these results also confirmed the effect of using CBI on improving English listening skills among ESP students; additionally, high levels of motivation and positive attitudes were exhibited by all the three study groups in Egypt, Saudi Arabia, and Bahrain. This suggests the effectiveness of incorporating CBI in ESP courses on students' motivation, their attitudes towards CBI and their English listening skills.

Key words: English for specific purposes (ESP), Content-Based Instruction Approach (CBI), Motivation, Attitude, Listening Skills, A Comparative study

## Introduction

Taking into account that English is the most commonly spoken language in the world today, its significance cannot be overlooked. English has become increasingly important in many fields, including education, the most significant field where English is required. English should therefore be the language of instruction at universities for several reasons, such as helping students obtain academic and scientific resources relevant to their majors. communicating with the outside world, and obtaining a good job. ESP is one approach that helps students become more proficient in using English language that is appropriate for their area of study or professional careers.

One subset of English as a foreign language is English for Specific purposes (ESP) that usually involves teaching the English language to university students or graduates, focusing on the specific language skills they need. ESP students usually have some exposure to the English language during their high school study; still, they need more English courses that closely relate to both their academic and professional life. This field has become more popular over the past few decades in many courses designed for EFL learners in business, informatics, tourism, engineering, health care and education as well.

English for specific purposes is an approach to language teaching in which all decisions regarding content, activities, teaching strategies and assessment techniques are based on the learners' aims for learning. Since ESP interconnects between language skills and their academic fields, learners become more motivated to interact with authentic texts in their science majors.

English for specific purposes (ESP) aims at providing learners with the necessary language skills for a situation in which they will use the language, also known as target needs. According to (Celce-Murcia, 2001, as cited in Yulia et al., 2019), ESP is founded on the idea that all language instruction should be tailored to meet the unique languageuse and learning requirements of a designated group of students, considering The sociocultural environment in which these students will utilize the language. The learnercentered approach is commonly referred to as ESP. because it meets the needs of learners who seek to learn English for use in their particular academic or professional fields.

Needs analysis (NA) was first used in language planning in the 1970s, and it is considered a fundamental ESP principle. Most of the original research on NA was found in ESP (Karimi & Sanavi, 2014; Nasser, 2020; Soroka, 2019; Sundari, 2022 and Zohoorian, 2015) whereby the focus was investigating learners' language needs that closely relate to their academic and professional experiences, their lacks and wants, and their points of strength and weaknesses in relation to the language skills. Needs analysis is crucial in ESP instruction since it facilitates the design of courses in a way that effectively suits the language needs of the learners.

Many strategies are identified to determine the needs of students in the context of ESP. The first of these is Target Situation Analysis (TSA), which outlines the tasks that students are required to perform in the target situation. are classified into three categories: Target needs necessities, lacks and wants. Present Situation Analysis (PSA) is another strategy which aims at determining the level of students' English proficiency at the start of the course and their current proficiency. Additionally, learning needs analysis (LNA) aims at investigating what the learners need to do to learn (Yulia et al., 2019). The present study is targeting both PSA and LNA of EFL non-major students with the aim of identifying their language proficiency level and their learning and development needs

Regarding teaching methods, the usual focus of ESP instruction is language that is learned within its own paradigm, depending on textbook activities. Due to the increasing level of global interconnectedness and the growing necessity for international cooperation in fields such as science, technology, agriculture and engineering, the significance of English as a common language has been underscored. Recently, it has been proposed that the adoption of Content-Based Instruction (CBI) in English for Specific Purposes (ESP) classrooms can contribute to a more profound comprehension of specialized subject matter as well as The cultivation of intercultural communication proficiency (Muttaqin & Chuang, 2023).

There are several potential difficulties in the educational context. One such challenge involves the tendency of instructors to oversimplify content, which may hinder students' ability to engage with complicated themes. Additionally, students may experience feelings of inadequacy when attempting to comprehend intricate subjects in a non-native language (Buehl, 2022). In response to these problems, scholars have suggested the use of adaptive bilingual techniques, which involve the utilization of both the native and target languages in accordance with the specific learning setting (Portolés-Falomir, 2015). These solutions are designed to leverage the advantages of immersion while addressing challenges related to comprehension.

The concept of content-based instruction (CBI), which teaches both language and content, gained popularity in the late 1980s and was linked to EFL/ESL instruction (Shirav, 2023). This approach facilitates language learning through subject-specific content, thus CBI has gained popularity in many EFL programs. CBI is one of the approaches that best addresses EFL learners' needs, in terms of gaining knowledge of both language and content related to their majors. In this sense, language is regarded as the means by which learners learn about a specific content. Then, at a later stage, learners will develop their target linguistic ability.

CBI centers around a certain topic that learners are required to learn about. This could involve a variety of topics that arouse their attention, ranging from scientific topics to entertaining ones. CBI seeks to improve the learners' knowledge of both language and content by offering them authentic, meaningful academic contexts. In CBI, language serves as a tool not only for learning, but also for discussing ideas, organizing information, and acquiring subject matter knowledge (Butler, 2005 and Shirav, 2023).

In CBI, instruction is centered around the content rather than the linguistic knowledge; it underscores the simultaneous integration of language and content learning. In this context, content is usually defined as academic subjects like math, science, or social studies. Language in CBI is used as a medium for subject content instruction. Through content learning, the language learning objectives are met. Most CBI courses have syllabi that vary greatly in format and detail and are derived from content areas. CBI is, to put it simply, a technique for teaching language and content simultaneously (Bula, 2014 and Muttaqin & Chuang, 2023).

## Content-based Instruction (CBI) and ESP

ESP contexts have proved its impact due to its potential to simultaneously develop language skills and subjectspecific knowledge. CBI aligns well with ESP. It focuses the integration of language learning with content learning, making it an ideal approach for ESP learners seeking to acquire language skills while mastering discipline-specific content (Barnard & Hawim, 2018). This approach has garnered considerable attention in recent research in ESP classrooms.

Recent research highlights the advantages of employing a CBI approach in ESP contexts. Lyster (2017) highlights that this approach enhances learners' language proficiency while immersing them in the terminology, concepts, and discourse patterns specific to their academic major.

Learners are exposed to authentic academic materials and content, such as research articles, reports, and case studies, which deepen their understanding of both the subject matter and the language necessary for communicating effectively within that domain. Additionally, CBI in ESP classes fosters critical thinking and problem-solving skills, as learners engage with complex content and are encouraged to analyze, synthesize, and communicate their findings.

The integration of a CBI approach in ESP classrooms offers several benefits. Recent studies have shown that learners who engage with CBI materials in their field of study experience improved language proficiency, as they are exposed to authentic language used in real academic or professional contexts. Moreover, this approach helps students develop their critical thinking skills, since they are required to analyze and apply discipline-specific knowledge using English. As ESP learners often have a clear goal related to their field of study, CBI equips them with both language competencies and specialized expertise (Jiang, Zhang & May, 2016).

Since English is the main international language in global markets, content-based instruction is crucial in preparing more competitive learners. Evidence has proven signs of improvement among students taking content-based instruction ESP courses, which could be in line with a lot of higher education administrative policies (Sibulkin, 2018).

To improve language learning outcomes and experiences, educators and policymakers must have a thorough understanding of students' viewpoints. This study attempted to investigate the effectiveness of using CBI in ESP classes particularly when it comes to developing their listening skills.

## Listening skills

Many people all over the world especially students frequently see English as a tool for gaining access to a multitude of resources, such as academic texts, internet information, and communication with others who speak different languages (Lee & Villacorta, 2017). Amongst the four language skills, listening is considered essential since it contributes to effective learning, active engagement of students and academic success. Listening is essential for both effective communication and academic achievement. Listening skills are essential for learners' academic success; the more listening is improved, the more learners are able to retain information, comprehend the received messages and communicate successfully.

Most specifically, students like the chance to practice their English listening comprehension since it exposes them to a variety of accents, dialects, and speech patterns from around the globe (Ibrahim, 2022).Students who are exposed to real-world English audio materials—like podcasts, interviews, and lectures—gain important listening experience and improve their comprehension of spoken language in everyday contexts (Field, 2008 and Lee, 2017).

Nonetheless, mastering listening skills in English may provide difficulties for certain students. It can be difficult for non-native English speakers, especially those with little exposure to the language, to understand fast-paced speech and strange accents. Furthermore, according to Graham (2006), language learners could struggle with sentence construction, word identification, and cultural allusions included in spoken speech.

Notwithstanding these obstacles, students generally view English as a useful teaching language for acquiring listening skills, appreciating its capacity to promote communication, broaden their knowledge, and equip them for engagement in a global society (Goh, 2017). Students concluded that the importance of English as a teaching language in a variety of educational contexts has increased significantly as it has become the universal language of communication. Thus, teachers and legislators need to be well-versed in the perspectives of their students if they are to enhance language learning experiences and results (Goh, 2017 and Lee, 2017).

## **Literature Review**

Considering the needs and motivations of the students, a variety of teaching and learning theories have emphasized the integration of a pre-designed syllabus, which enables consider what teachers to and how to teach methodologically; it also highlights the learning principles, learning variables, and learning techniques that students can employ. The introduction of (CBI) in English classrooms indicates the necessity of analyzing attitudes towards learning held by both teachers and students. This illustrates the significance of content to educators and the need to research effective teaching techniques and strategies for boosting students' academic proficiency and EFL learning progress. The study, involving EFL academics, found that the Dogme approach is crucial for strengthening relationships, enhancing communication skills, and promoting open-ended questions. Strategies to create an effective learning environment include warm-up oral questions, understanding evaluation, and motivation (Abdalgane et al., 2022).

Due to its increased usage as the language of instruction, English has gained popularity in many of the higher education institutions. In addition to the traditional contentbased instruction (CBI) methods, universities are now implementing English-medium instruction (EMI) and content and language integrated learning (CLIL) to deliver academic content in the language. Nonetheless, there is not enough agreement regarding the objectives and results of these strategies. The primary differences rest on how language and content are positioned in relation to one another in learning objectives and evaluation. Content serves as an acquisition, and students' language proficiency is evaluated (Brown & Bradford, 2016).

## **ESP** related studies

Considering that English is currently the most widely utilized language globally, its significance cannot be overlooked. English has become increasingly crucial in numerous professions, including education, the most significant field where English is required, thanks to modern technologies. English should therefore be the language of instruction in colleges for several reasons, such helping students obtain academic and scientific as resources relevant to their majors, connecting with the outside world and developing the language skills that are specific to a specific field or discipline. English for specific purposes (ESP) is a subdivision of English as a foreign language that addresses the learners' needs in a particular study field or job.

#### **ESP** studies in Egypt

English for Specific Purposes (ESP) began in Egypt in the late 1970s and has rapidly developed since the 1990s due to the need for competent English language and field professionals. The foundation of ESP centers at several Egyptian universities promoted the establishment of ESP conferences and the advent of in-depth research in the field, which ultimately led to an increase in interest in ESP in Egypt in 1990s and up to the present. ESP concentrates on subject-specificity over a universally applicable form of English (Ali, 2014).

In Egypt, the majority of ESP studies concentrated on analyzing learners' needs in a variety of ESP contexts, including engineering (El-Ghonaimy, 2015), mass communication (Lasheen, 2022 and Habib, 2020) and tourism (Abdulnaeim, 2021). ESP courses usually focused on boosting English skills in specialized fields. The goal of ESP courses was to give students the specialized language abilities they need to communicate successfully in their line of work. This can assist students in becoming more competent English language users.

Previous research focused on new technologies and their application in ESP teaching practices (El-Ghonaimy, 2015; Habib, 2020; Lasheen, 2022 and Lesiak-Bielawska, 2019). Technology integration in education enhanced teaching English for Specific Purposes (ESP), utilizing e-learning and online learning platforms. These platforms fostered autonomous learning, self-learning, and interactive environments, positively affecting reading comprehension skills like scanning, summarizing, and paraphrasing.

El-Ghonaimy (2015) investigated the effect of Computer Assisted Language Learning (CALL) on the development of English writing skills among ESP University Engineering students. The results indicated that the experimental group achieved better performance than the control group. in three CALL writing sub-skills with no significant difference in spelling. The study findings suggest that integrating highly advanced computer software learning tools, such as Computer-Assisted Writing (CAW), with skilled English learners could lead to improvements in several sub-skills of CALL English writing.

In his study, Habib (2020) investigated the efficacy of a computer-based English for Specific Purposes (ESP) program in enhancing the active listening abilities of students enrolled in a police college. The proposed program's tasks and exercises have demonstrated their efficacy in enhancing the active listening abilities of the study participants. The students in the experimental group exhibited a higher degree of hesitancy in participating in diverse activities, such as introspection, inquiry, and discourse.

In another study by Lasheen (2022), students were given access to credible sources of information to find answers to research questions on contentious subjects that they had selected based on their area of interest. Along with talking about language learning topics, they also shared information about the language functional skills that need to be developed. The study's findings demonstrated how WebOuests help students studying well mass communication improve their oral communication abilities.

Several studies investigated the language needs and interests of ESP learners in Egyptian Universities (Ali, 2014; Diab, 2021; Habib, 2020; Ibrahim, 2018 and Salem, 2019). These studies found that students are motivated intrinsically and extrinsically, with a deep interest in ESP classes. However, factors like unrelated materials, inconvenient schedules, lack of technology integration, poor teaching methods, and learning environments negatively affected their attitudes. Since academic disciplines were not a significant factor affecting motivation, these previous studies suggested that universities should develop ESP courses to boost students' motivation and attitudes.

Salem (2017) examined how business majors' brain dominance and learning styles can be affected by incorporating Brain-based instruction into language teaching. The results unveiled significant enhancements in the pupils' auditory comprehension abilities, lexical memory, and their favorable disposition towards acquiring language.

A study accomplished by Hassan (2018) aimed at identifying ESP teachers' perceptions of the characteristics, practices, and expectations of learner autonomy (LA) within the context of Egyptian universities. It combined the three fields of teacher cognition, ESP, and LA. The results demonstrated that ESP teachers believed that learners should be autonomous as possible and that to achieve this, ESP learners should be trained well to be more independent ones. This should be an integral part of ESP instruction.

In a study conducted by Seif (2019), the effects of an online course in English for Specific Purposes (ESP) on enhancing reading comprehension abilities were examined among a group of 30 first-year students at Mansoura University. The results indicated a substantial disparity between the pre and post reading comprehension assessments, with the posttest demonstrating the most influential influence. This indicates that an ESP program has the potential to greatly improve reading comprehension abilities.

#### ESP studies in Saudi Arabia

English for Specific Purposes (ESP) holds particular significance in Saudi Arabia due to the country's growing emphasis on modernization and globalization (Khawaji, 2022). ESP programs are adapted to fulfill the specific language needs of learners, which is crucial in a nation striving to diversify its economy and foster international partnerships. As Saudi Arabia seeks to become a hub for business, technology, and research, there is an increasing demand for graduates to be proficient in English for specific domains, such as medicine, engineering, and business. Consequently, ESP plays a pivotal role in Saudi higher education and vocational training institutions.

The implementation of ESP in Saudi Arabia has been met with both enthusiasm and challenges. While there is a recognition of the importance of ESP in the academic and professional spheres, educators often encounter difficulties in creating and providing ESP courses that align with the language needs of learners. Factors such as a shortage of qualified ESP instructors and limited access to up-to-date teaching materials posed challenges (Khan, 2019). Furthermore, the cultural context of Saudi Arabia, with its strong emphasis on Arabic language and Islamic studies, adds complexity to the integration of ESP into the curriculum. As a result, understanding the nuances of ESP implementation in Saudi Arabia is a critical area of research.

English for Specific Purposes (ESP) plays a crucial role in Saudi Arabia's educational landscape. As Saudi Arabia works to shift from an oil-based economy to a knowledgebased one, there is a growing need for skilled English language learners with specialized knowledge in particular fields (Alsmari, 2021). This shift in economic focus has heightened the importance of ESP programs in preparing Saudi students and professionals for specialized domains such as medicine, engineering, and business. The integration of ESP curricula in Saudi educational institutions is emblematic of the country's commitment to enhancing the linguistic and technical competencies of its workforce.

Despite the recognition of ESP's significance, its effective implementation in Saudi Arabia has encountered certain challenges. Moreover, the cultural and linguistic diversity within Saudi Arabia poses unique challenges in catering to the specific language needs of students from various regions. Addressing these challenges is imperative to ensure that ESP programs in Saudi Arabia align with international standards and meet the evolving demands of the workforce (Song & Zhou, 2022).

Still, a few studies examined students' perceptions of ESP (Alshayban, 2022; Gaffas, 2019 and Montasser & Althaqafi 2023), emphasizing the importance of identifying and analyzing learners' needs and difficulties during ESP instructional practices. Students believed that effective ESP instruction could help them understand specialized textbooks. Some of the students complained that the offered ESP courses did not enhance their English language ability.

#### **ESP studies in Bahrain**

Bahrain is a dynamic and quickly developing nation, so there is an increasing need for competent English language proficiency in a variety of fields. Building, tourism, banking, healthcare, and other businesses are driving the economy, and these sectors have created a critical demand for individuals who can communicate in English as well. ESP in Bahrain has passed through different and changeable circumstances which paved the way toward a new realm of applying technology, developing syllabuses, and offering a methodical examination to such programs.

In the past, general competency was the focus of English language instruction in Bahrain, with specialized linguistic abilities receiving less attention. But as Bahrain's economy became more diverse and international, there was a greater need for English language proficiency in certain professional settings. Prior to its limited inclusion into mainstream curriculum, ESP in Bahrain was characterized by fledgling initiatives inside educational institutions and vocational training centers (Al-Khatib, 2018).

In Bahrain, ESP programs are usually created to meet the language requirements of professions or industries. Institutions of higher learning, language schools, and corporate training facilities frequently provide these courses. They use a variety of instructional strategies, such as task-based learning, needs analysis, and authentic resources, to make sure students pick up language skills that are applicable to their future careers. The English Language Center at the University of Bahrain, which provides courses in specialized fields including corporate English, medical English, and English for engineering, is a well-known example of ESP implementation in Bahrain. Students can improve both their language skills and their comprehension of important terms and concepts in their chosen areas by taking these courses, which combine language education with content particular to the industry.

## Commentary

The rationale behind comparing ESP (English for Specific Purposes) programs across Egypt, Saudi Arabia, and Bahrain is to enable researchers gain valuable insights to develop a more comprehensive "fit-for-all" ESP program. More specifically, this comparative approach was based on: (a) needs assessment by examining similarities and differences of the learners' language needs in each country, (b) exploring common teaching practices and activities used in each country teaching practices, and (c) considering challenges faced in existing ESP programs of these countries to build on recommendations from previous studies. Overall, this comparative investigation aims to leverage the strengths of existing ESP programs in Egypt, Saudi Arabia, and Bahrain to design a more flexible and successful ESP program that addresses the different needs of learners across the region.

# Challenges in ESP classes *a*) Challenges in Egypt

In Egypt, it has been noticed that in the three categories of universities (foreign universities, international branch campuses, and Egyptian governmental universities), there are many challenges that face faculty members at these institutions. Some of these challenges include dissatisfaction with the learning materials written in English, some of the faculty members' weak mastery of the English communicative competence, and problems related to class size. Other challenges involve the weak improvement in English language proficiency, difficulty in understanding the content and deficiency of the content (Ali, 2014).

When it comes to ESP learners, some of the most common problems those learners encounter are misunderstanding of the content, insufficiency of the content, which makes the learners reluctant to enroll in English courses for their major. Additionally, there is a big discrepancy between English taught to students during various stages of education and students' readiness to study various sciences in English at the university level. This clearly indicates students' need for well-designed ESP courses that are closely related to both their academic study and work field as well (Ali, 2014 and Hasan, 2018).

## b) Challenges in Saudi Arabia

One of the foremost challenges in Saudi ESP classrooms stems from the multilingual and multicultural nature of students. With students hailing from diverse linguistic backgrounds and regions within Saudi Arabia, ESP instructors often encounter a wide range of language mastery levels, making it challenging to adapt instruction to individual needs. This diversity can lead to varying degrees of comprehension and participation, necessitating pedagogical strategies that address the unique linguistic profiles of learners (Alvi & Bilal, 2021).

Another significant challenge is the integration of technology and resources into ESP classrooms. While Saudi Arabia has made considerable investments in educational technology, instructors may face hurdles in accessing and effectively utilizing digital resources for ESP instruction. Moreover, ensuring equitable access to technology across regions and institutions remains a pressing concern. Effective teacher training and support in leveraging technology for ESP teaching are essential for addressing this challenge (Gaffas, 2019).

Teaching ESP in Saudi Arabia also presents educators with a multitude of challenges that stem from the unique sociocultural and linguistic context of the country. One significant challenge is the diversity of students' linguistic backgrounds and proficiency levels in English. Saudi ESP classrooms often comprise students from various regions of the country, each with distinct dialects and linguistic competencies. Due to this diversity, it may be more difficult to modify ESP instruction to address student's unique language needs (Nasim, AlTameemy & Alhamod, 2022).

The design and implementation of ESP curricula in Saudi classrooms also pose considerable challenges. The development of relevant, up-to-date, and contextually appropriate ESP materials can be a hurdle. Furthermore, aligning ESP instruction with the shifting demands of the labour market in Saudi Arabia can be challenging, as industries and sectors continue to diversify. Pedagogically, instructors often face difficulties in selecting appropriate teaching methods and assessments that effectively address the specialized language needs of ESP learners (Jiang, Zhang & May, 2016).

## c) Challenges in Bahrain

In Bahrain's educational system, there has been a discernible shift in favor of ESP becoming mainstream in

recent years. ESP courses have been developed by universities, colleges, and vocational training centers with the aim of assisting students who are prepared for employment in industries like finance, healthcare, tourism, and hospitality. To create customized curricula and training programs, educational institutions and industry partners collaborate to define the current state of ESP in Bahrain. Although there has been progress, issues including the absence of authentic materials and the scarcity of competent teachers continue to affect the efficacy and quality of ESP delivery (Al-Mahrooqi & Al-Bahrani, 2020).

There is a great deal of promise and room for expansion for ESP in Bahrain going forward. To reach its maximum potential, coordinated efforts are required to address current issues and take advantage of new trends. The advancement of ESP education in Bahrain necessitates the implementation of professional development programs for ESP instructors, the creation of locally relevant materials, and more cooperation between academics and business. Additionally, ESP programs may be made more accessible and successful by utilizing cutting-edge pedagogical techniques and technology. This will enable students to succeed in their chosen fields and support Bahrain's socioeconomic development (Al-Nouh & Alsulaiman, 2023).

ESP has a lot of room to grow and flourish in Bahrain, even with the obstacles in its way. With the nation's economy becoming more diverse and drawing in outside capital, there will probably be a greater need for English language proficiency in particular professional settings. This offers chances for creative methods of teaching ESP, like blended learning, online learning, and certification programs tailored to industries. Additionally, by incorporating ESP into higher education and vocational programs, Bahraini graduates will be better equipped to compete in the global economy and have better employment and career possibilities. Through ESP infrastructural, training, and curriculum development investments, Bahrain can establish itself as a regional leader in professional training and English language instruction.

Thus, the language requirements of professionals in Bahrain in a variety of industries are mostly met by English for Specific Purposes. Through specialized training, realworld resources, and industry partnerships, ESP programs assist students in acquiring the language proficiency required for success in their chosen areas. There are chances for expansion, innovation, and strategic alliances that will improve workforce development and language instruction (Zohrabi, 2014 and Al-Nouh & Alsulaiman, 2023).

## Commentary

Based on reviewing previous studies, it is evident that ESP has gained a widespread acceptance in non-English speaking countries, not only in Egypt but in Saudi Arabia and Bahrain as well. ESP courses are believed to lessen any language barriers that might arise when EFL learners start their academic study and pursue their work life. This could effectively occur when the above-mentioned challenges are addressed, in terms of acknowledging the needs of the learners, realizing the pre-requisites of the labor market, adopting teaching approaches that foster the teaching and learning processes and attends to the individual differences among learners. Content-based Instruction (CBI) is one approach that could help learners learn both content and language in an interesting and motivating way.

# **Context of the problem**

English for Specific Purposes (ESP) programs are designed to provide learners with the language skills mandatory for their particular academic or professional fields. However, the conventional methods of ESP instruction often lack engagement and fail to provide learners with authentic and contextually relevant content. As a result, many ESP learners find it difficult to fill the gap between what they actually learn in classrooms and how language is actually used in their specialized fields.

To validate the problem, data was compared and analyzed based on the common needs analysis survey that was administered to 200 sophomore non-major EFL students enrolled in three colleges in Egypt, Saudi Arabia and Bahrain in the first semester of the academic year 2022-2023. This survey was the first stage in ESP course development that aimed at determining ESP students' language learning needs, the extent by which they master the language skills and their common beliefs regarding the reasons for learning the English language. Additionally, a semi-structured interview was utilized to clarify the characteristics and origins of any potential issues that ESP students in the three colleges might encounter and how these might impact the process of teaching and learning.

Results indicated that in spite of the students' different fields of training, there were many similarities between

their responses. Nearly 85% of all participants' responses showed their common need for extensive tasks targeting listening skill. Moreover, the results implied that students had negative attitudes towards ESP learning and teaching experiences, which best explained their low motivation for learning.

One potential solution to this problem is the implementation of Content-based Instruction (CBI) in ESP courses, where subject-specific content is delivered in the English language. While CBI has gained popularity in higher education, its application in ESP contexts remains underexplored.

## Statement of the problem

Based on data derived from the exploratory needs analysis tools as being administered in three colleges, it was commonly noticeable that EFL non-major science students enrolled in the three colleges exhibited low mastery of the listening skills in addition to their negative attitudes and low motivation for learning. This study attempted to comparatively examine the effectiveness of a Content-Based Instruction (CBI) approach as a framework to enhance ESP students' listening skill, motivation for learning and their attitudes.

# Questions of the study

The current study aimed at answering the following questions:

- 1. What is the effect of using CBI on improving English listening skills among ESP students?
- 2. What is the effect of using CBI on ESP students' motivation for learning?

## Journal of Research in Curriculum, Instruction and Educational Technology

3. What is the effect of using CBI on ESP students' attitudes towards using CBI?

## Aims of the study

The present study aimed at:

- 1. Identifying the effectiveness of using CBI on improving English listening skills among ESP students.
- 2. Identifying the effectiveness of using CBI on ESP students' motivation for learning.
- 3. Identifying the effectiveness of using CBI on ESP students' attitudes towards CBI.

## Hypotheses of the study

The following hypotheses were derived from the study questions:

- **1.** There would be a statistically significant difference between mean scores of the study group in the pre and the post administrations of the listening test, in favor of the post administration.
- 2. There would be a statistically significant difference between mean values of the study group in the pre and the post administrations of the motivation scale towards learning, in favor of the post administration.
- **3.** There would be a statistically significant difference between mean values of the study group in the pre and the post administrations of the attitude scale towards CBI approach, in favor of the post administration.

# Significance of the study

This study can hopefully lead to:

- Shedding light on CBI and its importance in ESP teaching and learning.

- Understanding the benefits of combining academic subject matter with language learning.
- Providing useful tools for identifying students' leaning needs, lacks and wants.
- Providing a framework for using CBI in ESP teaching with the aim of developing language skills.
- Enhancing learners' listening skills which are vital for academic success and professional communication in English.
- Increasing English non-majors' motivation towards learning the language.
- Developing learners' positive attitudes towards CBI which could impact both their language learning as well as engagement and long-term learning success.
- Enabling educators to design courses that foster a more engaging and stimulating learning environment for ESP students through integrating CBI.
- Convincing educators to adopt or adapt CBI to their specific contexts according to their students' needs.
- Helping educators by addressing Regional Variations through the comparative aspect, focusing on Egypt, KSA, and Bahrain to adapt their instruction to the specific cultural and educational backgrounds of their students.
- Providing curriculum developers with data-driven evidence to support the use of CBI in ESP programs, potentially influencing content and pedagogical practices.

## Journal of Research in Curriculum, Instruction and Educational Technology

- Informing Language Education: The findings can contribute to a broader understanding of CBI's effectiveness in language education, potentially informing best practices beyond the ESP context.
- Enhancing ESP Programs globally, making them more engaging and effective for students pursuing specific English language needs.

## **Delimitations of the study**

The current study is delimited to the following:

- The study was conducted on a total of 124 second year science majors, at the colleges where the researchers work, in three universities at three countries (Egypt, Saudi Arabia, Bahrain). Most of the students had common knowledge of the English language at an intermediate level. During their two years of academic study, those students have taken weekly courses in English (with more focus on linguistic knowledge grammar and vocabulary).
- The study took place in the three universities at three countries (Egypt, Saudi Arabia, Bahrain) during the period (15th February 2023 15th May 2023).
- The study made use of CBI, an instructional approach that effectively impacts both language of the learners and their content-related knowledge.

#### **Definition of terms Content-based Instruction**

Brown & Bradford (2016) defined CBI as an approach to instruction that centers around teaching subject-matter content in a second or foreign language.

Content-based Instruction is operationally defined as an approach to language instruction for teaching ESP courses,

focusing on both subject-related content and academic language skills.

## **English for Specific Purposes (ESP)**

English for specific purposes (ESP) refers to language teaching that focuses on the particular communication needs and conventions of various social groups (Hyland, 2007). In this study, operational definition refers to the unique element of teaching English as a foreign language to university students, with a special emphasis on teaching content that is aimed at achieving certain goals.

## Listening

Brownell (2018) defines it as a process of taking in, giving meaning to and reacting to both spoken and nonverbal ones.

Listening is operationally in this study defined as the multiple processes involved in understanding the target language being spoken. This includes extracting meaning, understanding vocabulary, and drawing conclusions.

## **Motivation for learning**

Madrid Fernández (2001) defined motivation as the collection of processes that include arousal, direction, and maintenance of behavior. It is used to show a learner's tenacity and consistent focus on particular tasks rather than other activities.

Motivation is procedurally defined as a key element in EFL learning referring to the degree by which the learners are stimulated to learn the English language, considering the main elements in the instructional process: the students, the teacher and the teaching-learning context.

# Attitude

Attitude, as defined by psychological research, is a theoretical cognitive and affective concept that characterizes an individual's disposition. Additionally, it might denote a psychological inclination to articulate one's assessment of a specific attribute and the extent of approval or disapproval bestowed upon it (Gaiseanu, 2020, p.13). In this study, attitude is defined operationally as the learner's perception and assessment of the learning circumstance, which is expressed through positive or negative reactions.

## Method

#### **Research Design**

This research employed a one group pretest-posttest research design, whereby a listening test, a motivation scale and an attitude scale were administered to the assigned study group at three universities in Egypt, Saudi Arabia, and Bahrain. The study group was taught ESP using the CBI approach.

# Variables of the study The independent variable

An ESP program based on CBI approach.

## The dependent variables

Listening skills, motivation for learning and attitude.

# **Research Setting**

The study took place in three colleges where the researchers work in three universities in Egypt, Saudi Arabia, and Bahrain where English for Specific Purposes (ESP) courses are being taught.

## **Participants**

The participants in this study were 2nd year, science majors in three universities in Egypt, Saudi Arabia and Bahrain, during the academic year 2022-2023. The overall quantity of the participating students was 124 who were both male and female students, enrolled in ESP courses, and studied English for science course through CBI (content-based instruction). Homogeneity was established between participants at the entry level before the intervention as follows:

## Age

All the participants recruited in the three groups were aged between 19 and 20 at the beginning of the study.

## Linguistic background

All the participants of the study have been studying English during high school whereby they had to get a minimum score on the English exam of their high school certificate to join university programs. Usually, the English courses provided at universities require non-majors to have 1–2-hour language classes a week. These courses primarily cover general English, with a strong emphasis on grammar, vocabulary growth, and reading. It is believed that the content of these courses will be applicable to students' future careers, whether in the scientific or social sciences sectors.

## Instructor

The researchers taught the three study groups in the three universities by themselves.

## Instruments of the study

To fulfill the study objectives, a needs-analysis survey, a semi-structured interview, a listening test, a motivation scale and an attitude scale were utilized.

## **Exploratory study instruments:**

# Needs-analysis survey

Needs analysis is the strategy of gathering information about the students' priorities which is an important step in designing ESP courses, a needs-analysis survey was developed to allows the researchers set out course objectives and determine a teaching approach. It consisted of three parts: level of the English language proficiency, level of importance of the need for the English language skills and difficulty with language sub-skills. The survey was submitted to a panel of jury members to determine its suitability for the objectives of the study and for the participants. The members of the jury agreed that it was appropriate and had face validity.

# Interviews

To gather pertinent data for the present study, the researchers conducted semi-structured interviews to gather more specific information, deeper insights, and a more comprehensive understanding of the learners' needs. The interview was conducted in English.

The researcher analyzed the interview questions and administered them to a random sample of sophomore students to obtain their thoughts. The statements made by the students were quoted and transcribed verbatim. Following the completion of the interviews, the researcher proceeded to code the statements and subsequently compared the assigned codes to guarantee the trustworthiness of the gathered data. The following are some of the questions posed by the interviewers:

- How often do you need English in your academic study?
- What was the most difficult situation in which you needed English?
- What activities do you wish you could do in English?
- Specify your problems in these domains: vocabulary, writing, grammar, reading, listening, speaking, pronunciation.
- How do you perceive the use of content-based instruction for English listening skill development?

It became evident from the students' responses their need for additional resources. They expressed a desire for the researchers to provide more listening exercises and videos that closely relate to their academic study. Additionally, many students exhibited a positive perception of English as a teaching language. They acknowledged the significance of English language in improving their chances for success in both their academic study and labor market.

## Measuring instruments:

# A listening test

A 25-item multiple choice pre-posttest was designed to evaluate ESP science majors' listening skills, resulting in a cumulative score of 100. Clear instructions were presented at the commencement of each section. The test was prepared to measure the following sub-skills:

- a) Identifying keywords and phrases
- b) Comprehension of main ideas and supporting details
- c) Understanding numerical data and chronological information
- d) Extracting specific information through listening
- e) Identification of signal words and phrases

The listening test was submitted to a panel of 5 TEFL jury members to evaluate its suitability for the objectives of the study and for the participants. The jury members approved its face validity and its appropriateness for the assigned study participants. Before the test was administered, their comments and suggestions were taken into consideration.

The reliability of the test was established through the application of the test-retest design method. The two applications' correlation coefficient of 0.9 indicates a

satisfactory degree of reliability. During the first semester of the academic year 2022–2023, the test was piloted, and some adjustments were made in light of the results. It was determined that 60 minutes was enough time to complete the test.

## A motivation scale

The researchers administered a pre-post motivation scale to the three study groups to assess their level of motivation in utilizing Content-based Instruction (CBI) in teaching ESP. The five-point Likert scale comprised a total of 20 items. Items which measure intrinsic motivation are related to enjoyment in learning English and how it is beneficial to both academic study and career.

## An attitude scale

An attitude scale was designed and used as a tool to measure how the prepared ESP program affects second year science majors' attitude towards Content-based Instruction. The scale comprised 10 items and the complete score of the attitude scale was 50.

A jury comprised of five staff members with TEFL expertise judged the attitude scale to verify the accuracy of its content. The scale was found to be appropriate for the study objectives, although some changes were recommended. The Alpha Cronbach method was employed to establish the scale's reliability. Cronbach's alpha was 0.953, a high value that is significant at the level (0.01).

# The CBI program

The program was conducted in three universities across three countries (Egypt, Saudi Arabia, and Bahrain) during the second semester of the academic year 2022-2023. The program was administered in three stages: 1) pre-testing, 2) implementing CBI, and 3) post-testing. The listening test, motivation scale, and attitude scale were administered to all research groups both before and after the implementation of the CBI program, encompassing pretesting and post-testing administrations. The researchers provided instruction to three study groups over a period of 6 weeks, with two sessions per week. Each session had a duration of one hour.

#### Aims and content of the program

The study program employed a content-based instructional methodology with the aim of developing the three study groups' listening skills, motivation for learning and their attitudes towards CBI.

Content of the program was determined in light of the targeted listening sub skills; it encompassed five distinct topics with their corresponding listening skills - (a) business (focused on identifying key words and phrases), (b) cognitive science (emphasizing comprehension of main ideas and supporting details), (c) sociology (aiming to enhance understanding of numerical data and chronological information), (d) physiology (centered on extracting specific information through listening), and (e) psychology (emphasizing the identification of signal words and phrases).

The listening materials were structured as videos, a collection of dialogues, with accompanying scripts offered to aid students in their comprehension of vocabulary and sentence structures, as well as to enhance their comprehension of the subject matter.

#### **The Intervention**

In the first week of administration and during the orientation session, the notions of CBI and ESP were explained, and a detailed description of the main aims of the program, content area, activities and evaluation strategies was introduced.

For the following 5 weeks, content of the program was tackled as follows:

- Each week constituted two 1-hour sessions whereby the first session was devoted to key vocabulary and structure, engaging videos that are related to the content of each unit followed by discussion to enhance students full understanding of the content given. Authentic listening materials and videos were exploited to facilitate both content comprehension and language in a way that motivated the study groups to learn and stimulated their interest in the course content. Homework assignments were given by the end of the session.
- The second session was devoted to practice more listening tasks and activities, targeting the listening subskill of each unit. Based on their understanding, students were also encouraged to give short presentations based on their understanding of the content provided. Additionally, time was given for discussing the previously given home assignments.
- By the end of the second session, students were given 5 minutes reflection, jotting down their feelings and reactions to the topic given.

## Activities

The students throughout the intervention were engaged in a group of tasks and activities, targeting mainly each of the

assigned listening sub-skills followed by a series of discussion activities as follows:

- Unit 1: interrogative statements that require a simple "yes" or "no" response, questions that present several options for selection and exercises that involve matching.
- Unit 2: pretending the content by the title before listening, listing the main ideas, and summarizing what was heard.
- Unit 3: activities that require arranging events or procedures in sequential numerical order, interrogative statements that require a simple "yes" or "no" response and exercises that require matching.
- Unit 4: multiple choice tasks, making a detailed scheme of what was listened to or watched and completion tasks.
- Unit 5: interrogative statements that require a simple "yes" or "no" response, questions that present several options for selection and exercises that involve matching.
- Discussion activities were carried out by the end of each week to engage learners in both the content and language provided.

## **Evaluation procedures**

The CBI program used the following evaluation procedures:

- Formative assessment throughout each session included various listening tasks. These tasks, such as

Journal of Research in Curriculum, Instruction and Educational Technology

note-taking exercises, allowed for ongoing feedback and adjustments to teaching strategies to ensure continuous improvement.

- Summative evaluation quizzes at the end of each unit. These quizzes measured learners' mastery of the assigned learning objectives for that unit. This approach provided a progressive evaluation, ultimately contributing to the assessment of the overall program's effectiveness.

## **Results And Discussion**

## Results

This study explored the effect of Content-based instruction (CBI) in teaching ESP on the development of the threestudy group's listening skills, motivation for learning and their attitudes towards CBI. Scores on the pre-post administration of the study instruments were analyzed and compared.

## Validating hypotheses of the study

**Hypothesis one** hypothesized that there would be a statistically significant disparity in the average scores of the study group before and after the administration of the listening test, with the post-administration scores being higher.

Before conducting the test, a one-way analysis of variance test was performed to assess the assumption of normality. It was determined that this assumption was satisfied because the distributions of the three groups showed skewness values ranging from -0.741 to -0.925 and kurtosis values ranging from 0.240 to 0.639, all of which were less than |1.96|. The assumption of homogeneity of variances was assessed and confirmed using Levene's F test, with F (2, 122) = 0.728, p = 0.485.

To test this hypothesis, means of the study participants' scores on the post administration of the listening test were calculated. Differences in the means of the study participants' scores on the pre-post administration of the listening test were calculated and tabulated. The descriptive statistics represented in the arithmetic averages, standard deviations, T value and Blake's Gain Ratio were calculated for the listening test for each of the three research groups, and the results of the descriptive statistics are as follows:

 Table (1) Descriptive statistics, T value and Blake's Gain Ratio for the

 listening test

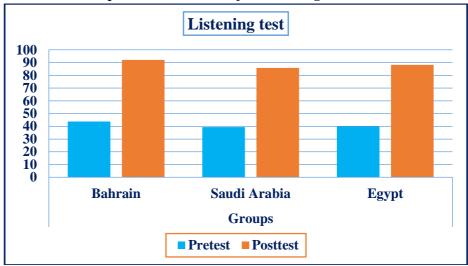
	a		Pretest		Posttest		Т	a.	Blake's
	Groups	Ν	М	Std.	M Std. valu	value	Sig.	Gain Ratio	
1	Bahrain	40	43.82	5.31	92.16	11.16	28.99	0.000	1.34
2	Saudi Arabia	42	39.36	4.77	85.92	12.18	22.79	0.000	1.23
3	Egypt	42	39.92	4.83	88.28	10.69	26.38	0.000	1.29

Results represented in Table (1) above revealed that there was a statistically significant difference between mean scores obtained by the study participants in the three groups on the pre-post administration of the listening test, favoring the post administration. Additionally, Blake's Gain Ratio values ranged from (1.23 to 1.34), all of which are greater than the acceptable ratio set by Blake (1.2). This which indicates the effectiveness of the CBI program in developing the listening skills of the three study groups (Blake, 1966: 99).

Again, the following figure presents the differences between the averages of the three groups in the pre- and post-administration of the listening test:



The differences between the averages of the three groups in the pre- and post-administration of the listening test



The one-way analysis of variance test was also used to verify the existence of differences between the averages of the scores of the students of the three groups in the listening test.

U	Table (2)
	P value and its significance for the listening test

Post listening	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1651.28	2	825.64	126.02	0.000
Within Groups	799.32	122	6.55		
Total	2450.60	124			

It is clear from the previous table that the calculated P value is statistically significant at the level of 0.01, which suggests that there are statistically significant differences between the averages of the three groups in the dimensional application of the listening test, and these results also confirm the effect of using content-based

instruction (CBI) on improving English listening skills among ESP students.

Due to the presence of statistical significance, the Scheffe test was used to make dimensional comparisons between each of the three groups separately, and table (3) shows the dimensional comparisons using the Scheffe test.

Multiple Co	omparisons	Scheffe	Mean Difference	Std.	Sig.	95% Confidence Interval	
Dependent Variable	(I) group	(J) group	( <b>I-J</b> )	Error		Lower	Upper
Post listening	Bahrain	KSA	6.24	1.84	0.000	2.88	8.75
	Bahrain	Egypt	3.88	1.69	0.000	1.72	6.68
	KSA	Egypt	-2.36	1.72	0.036	-3.94	-0.17

Table (3)Scheffe values and their statistical significance

It is obvious from the above results that the average differences between the grades of the students of the first group and the students of the second group are statistically significant, which indicates that there are differences in favor of the students of the first group from Bahrain. It is also clear that there are statistically significant differences between the grades of the students of the first group and the students of the third group, which indicates that there are differences in favor of the students of the first group from Bahrain. There are also statistically significant differences between the grades of the students of the second group and those of the students of the third group, for the benefit of the students of the third group from Egypt. The present study program had the greatest impact on the development of listening skills in Bahrain. **Hypothesis two** predicted that there would be a statistically significant difference between mean values of the study group in the pre and the post administration of the motivation scale towards learning, in favor of the post administration.

Prior to administering the motivation scale, the one-way analysis of variance test was conducted, the assumption of normality was evaluated and determined to be satisfied as the three groups' distributions were associated with skewness (between -0.685 to -0.877) and kurtosis (between 0.459 to 0.520) less than |1.96| respectively. The assumption of homogeneity of variances was tested and satisfied based on Levene's F test, F (2, 122) = 0.985, p = 0.121.

The descriptive statistics represented in the arithmetic averages, standard deviations, T value and Blake's Gain Ratio were calculated for the Motivation scale for each of the three research groups, and the results of the descriptive statistics are as follows:

Table	(4)
-------	-----

Descriptive statistics, T value and Blake's Gain Ratio for the motivation

~		N	Pretest		Posttest		Т	C,	Blake's
	Groups		М	Std.	Μ	Std.	value	Sig.	Gain Ratio
1	Bahrain	40	48.09	11.29	89.28	6.13	24.53	0.000	1.21
2	Saudi Arabia	42	45.11	12.38	90.50	7.25	20.25	0.000	1.28
3	Egypt	42	43.66	18.69	94.21	7.64	16.03	0.000	1.40

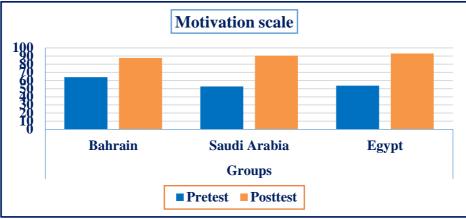
scale

Results represented in Table (4) revealed that there was a statistically significant difference between mean scores obtained by the study participants in the three groups on the pre-post administration of the motivation scale, favoring the post administration. Additionally, Blake's Gain Ratio values ranged from (1.21 to 1.41), all of which are greater than the acceptable ratio set by Blake (1.2) (Blake, 1966, p.99), which emphasizes the effectiveness of the CBI program in developing the motivation for learning among the three study groups.

Figure (2) shows the differences between the averages of the three groups in the pre- and post-administration of the motivation scale:



The differences between the averages of the three groups in the pre- and post-administration of the motivation scale



The one-way analysis of variance test was also used to verify the existence of differences between the averages of the scores of the students of the three groups in the motivation scale.

Table (5)P value and its significance for the motivation test

Post motivation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	612.60	2	306.302	6.24	0.003
Within Groups	5992.60	122	49.12		
Total	6605.20	124			

It is clear from the previous table that the calculated P value is statistically significant at the level of 0.01, which indicates that there are statistically significant differences between the averages of the three groups in the dimensional application of the motivation scale, and these results also confirm the effect of using content-based instructions (CBI) on ESP students' motivation for learning.

Due to the presence of statistical significance, the Scheffe test was used to make dimensional comparisons between each of the two groups separately, and the table (6) shows the dimensional comparisons using the Scheffe test.

Multiple Com	Mean Difference	Std. Error	Sig.	95% Confidence Interval			
Dependent Variable	(I) group	(J) group	( <b>I-J</b> )	2		Lower	Upper
Post_ motivation	Bahrain	Bahrain KSA		1.61	0.272	-6.53	0.83
	Bahrain	Egypt	-4.93	1.54	0.029	-8.69	-1.43
	KSA	Egypt	-3.71	1.53	0.058	-5.50	0.59

Table (6)Scheffe values and their statistical significance

It is clear from the results of the previous table that the average differences between the grades of the students of the first group and the students of the second group are statistically significant, which indicates that there are no differences between the two groups, meaning that the program had the same effect on the development of motivation of both groups (Bahrin- KSA). There are statistically significant differences between the grades of students of the first group (Bahrin) and students of the third group, in favor of students of the third group from Egypt. On the other hand, there are no differences between the grades of students of the second group and students of the third group. This indicates that the program had the same impact on the development of motivation on the students of Egypt and Saudi Arabia.

Hypothesis three predicted that there would be a statistically significant difference between mean values of the study group in the pre and the post administration of the attitude scale towards CBI approach, in favor of the post administration.

Prior to administering the motivation scale, the one-way analysis of variance test was conducted, the assumption of normality was evaluated and determined to be satisfied as the three groups' distributions were associated with skewness (between -0.713 to 0.500) and kurtosis (between -0.341 to 0.161) less than |1.96| respectively. The assumption of homogeneity of variances was tested and satisfied based on Levene's F test, F (2, 122) = 0.554, p = 0.452.

The descriptive statistics represented in the arithmetic averages, standard deviations, T value and Blake's Gain Ratio were calculated for the attitudes scale for each of the three research groups, and the results of the descriptive statistics are as follows:

Table (7)

Descriptive statistics, T value and Blake's Gain Ratio for the attitudes scale

	~		Pretest			Posttest		Т	<b>C</b> '	Blake's		
Groups		Ν	М	Std.		Μ	Std.	value	Sig.	Gain Ratio		
1	Bahrain	40	20.19	8.47		42.85	4.61	19.12	0.000	1.21		
2	Saudi Arabia	42	19.42	5.39		46.02	2.60	25.15	0.000	1.40		
3	Egypt	42	19.38	5.28		48.54	2.73	27.37	0.000	1.54		

Results represented in Table (7) revealed that there was a statistically significant difference between mean scores

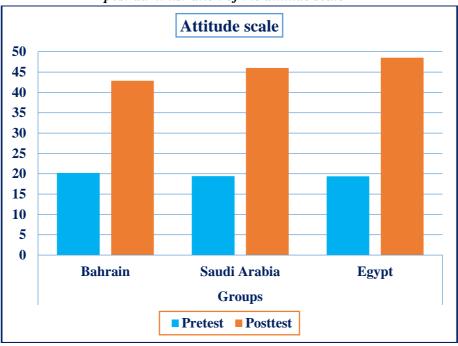
319

obtained by the study participants in the three groups on the pre-post administration of the attitude scale, favoring the post administration. Additionally, Blake's Gain Ratio values ranged from (1.21 to 1.54), all of which are greater than the acceptable ratio set by Blake (1.2) (Blake, 1966, p.99), which indicates the effectiveness of the CBI program in developing the study groups' attitude towards CBI.

The following figure shows the differences between the averages of the three groups in the pre- and post-administration of the attitude scale:

Figure (3)

The differences between the averages of the three groups in the pre- and post-administration of the attitude scale



The one-way analysis of variance test to verify the existence of differences between the averages of the scores of the students of the three groups in the attitude scale.

<i>P</i> value and its significance for the attitudes test									
Post attitudes	Sum of Squares	df	Mean Square	F	Sig.				
<b>Between Groups</b>	1368.06	2	684.028	58.05	0.000				
Within Groups	1437.67	122	11.784						
Total	2805.73	124							

Table (8) P value and its significance for the attitudes tes

It is clear from the previous table that the calculated P value is statistically significant at the level of 0.01, which suggests that there are statistically significant differences between the averages of the three groups in the dimensional application of the attitudes scale, and these results also confirm the effect of using content-based instructions (CBI) on ESP students' attitudes for learning. Due to the presence of statistical significance, the Scheffe test was used to make dimensional comparisons between each of the three groups separately, and the following table shows the dimensional comparisons using the Scheffe test: Table (9)

Multiple Com	parisons Sch	leffe	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
Dependent Variable	(I) group	(J) group	( <b>I-J</b> )	LIIO		Lower	Upper
Post_attitudes	Bahrain	KSA	-3.17	0.75	0.000	-5.62	-1.88
	Bahrain	Egypt	-5.69	0.75	0.000	-6.95	-3.22
	KSA	Egypt	-2.52	0.75	0.001	-3.19	-0.86

Scheffe	values	and	their	statistical	significance
---------	--------	-----	-------	-------------	--------------

It is clear from the results of the previous table that the average differences between the grades of the students of the first group (Bahrin)and the students of the second group (KSA) are statistically significant, which states that there are differences in favor of the students of the second group from the Kingdom of Saudi Arabia. It is also clear that there are statistically significant differences between the grades of the students of the first group (Bahrin) and the students of the third group, in favor of the students of the third group from the Kingdom of Bahrain. In addition, there are statistically significant differences between the grades of the students of the second group (Bahrin)and the students of the third group (Egypt), for the benefit of the students of the third group from Egypt. The present study program had the greatest impact on the development of attitudes in Egypt.

## Discussion

The following discussion will juxtapose the present study outcomes with existing literature, elucidating consistencies, and disparities, and delineate the broader implications of our study.

Considering the abovementioned results of the study, it can be verified that CBI had positively contributed to the improvement of the three study groups' listening skills. CBI also proved its effectiveness in fostering the study participants' motivation for learning and subsequently positively affected their attitude towards the use of CBI in ESP instruction.

After the implementation of the intervention, the three study groups scored higher in each of the post administration of the listening test, motivation scale and attitude scale, indicating efficacy of the CBI in teaching English for specific purposes. This verifies the effectiveness of CBI as an approach to teaching and learning which goes in line with results obtained from similar studies (Ahmed & Lenchuk, 2020; Amiri & Fatimi, 2014; Bula Villalobos, 2014; and Shirav, 2023).

In their study, Ahmed & Lenchuk (2020) concluded that CBI can assist teachers in seeing how language learners develop concepts and abstract thoughts more effectively than other forms of instruction. Data analysis showed that CBI was beneficial in increasing learners' awareness of the idea of a language constituent, expanding their understanding of the English passive, and enhancing their phrasal and sentential meaning-making skills.

The Grammar Translation Method (GTM) was contrasted with content-based instruction (CBI) in terms of their effect on students' language learning and achievement in their final exams as well as their language learning orientation. The results revealed that the group taught by the CBI performed better than the one taught by the GTM. Based on this study, CBI is believed to be motivating for learners since language is a tool of delivering suitable and meaningful content (Amiri & Fatimi, 2014).

Content-based Instruction (CBI) has some principles and characteristics that are significant for instructors willing to use this approach in their classrooms. In the current study, these principles include: active participation of the students in the exchange of content, language is used as a way of acquiring information and better satisfaction of students' needs than any other approach (Bula Villalobos, 2014). This goes in line with Bula Villalobos (2014) as well as Brown & Bradford (2016) where they emphasized the significance of CBI as a method of teaching languages that uses texts, activities, tasks, and content derived from subject-matter topics to give students real-world language input and get them use real-world language.

### **Comparative analysis of the present study three groups** (Egypt, KSA and Bahrain)

The current study results demonstrated that while there were many similarities among the three study groups'

responses to the post-administration of the study instruments, there were also some notable differences, primarily attributable to the learners' distinct language needs and varied linguistic backgrounds. Therefore, understanding the needs and challenges of the students may help in modifying the ESP instruction strategies used in classrooms.

One of the objectives of the present study was to investigate the effectiveness of CBI on the improvement of the listening skills among the three study groups. The analysis revealed significant differences between the mean scores of the pre and post administration of the listening test. This suggests a total improvement in each of the listening sub-skills: identifying keywords and phrases, comprehension of main ideas and supporting details, chronological understanding numerical data and information, extracting information and identification of signal words and phrases. These results are consistent with those of Jannah, et al., (2022) who have assured that their students' listening comprehension increased after being treated by CBI approach.

With regard to the current study participants' responses to the motivation scale, it was evident that the study program based on CBI had a great contribution to their motivation for learning. Most of the study participants agreed to a great extent that following the interventional program, they felt more motivated to use English in their academic studies, they became more interested in the subject-matter and they also agreed that CBI helped to improve their overall language proficiency. This study builds on the research of Miyasako (2018) who investigated the effectiveness of Content and Language Integrated Learning (CBI) on active learning in university students. Miyasako's findings indicated that CBI enhanced listening comprehension, especially for students with moderate motivation levels.

The participants in the present study typically displayed a favorable disposition towards the CBI-based curriculum. The participants' replies to the scale's items during the prepost administration clearly indicated a preference for the post administration. The study conducted by Lai and Aksornjarung (2018) validates these findings. They examined the motivation and attitudes of English as a Foreign Language (EFL) learners towards studying English using content-based instruction (CBI) at a university in Thailand. Based on statistical research, students exhibited a generally good attitude towards the CBI-based course and displayed a modest level of willingness to acquire English language skills.

The results of the current study are indicative of the importance of CBI as an approach for developing both knowledge and linguistic ability in the target language. This aligns with the broader pedagogical trend emphasizing the importance of language integration within subject-specific contexts. The results affirm that ESP, when combined with effective teaching methods like content-based instruction (CBI), can be a powerful tool for educators aiming to enhance English language proficiency among ESP students.

# Conclusion

In summary, this research aimed at determining the impact of integrating ESP with content-based instruction (CBI) on the improvement of English listening skills and fostering motivation and positive attitudes among ESP students in three universities in three different countries (Egypt, Bahrin, and KSA). Various tools were employed to validate the efficacy of this approach, including a listening test, a motivation for learning scale and an attitude scale. The quantitative findings indicated an enhancement in the three groups of participants' listening skills and attitude towards the merged ESP and content-based instruction approach. Furthermore, all participants expressed favorable views of this approach, highlighting its engaging and beneficial nature. The integrated approach also fostered a collaborative learning environment, facilitating rich discussions among students and with instructors.

### Limitations

- 1- Learning EFL is influenced by various factors. These include factors that are related to the student, the teacher, and the context (Yen, et al, 2019). The limitation of the present study is that the results obtained may have been affected by factors including students' proficiency in English and the previously English courses taught at high school, students' learning autonomy, learner's learning strategies, teachers' pedagogical knowledge and skills, teachers language competence and context-related factors. To overcome the limitations of the present study, students were encouraged to be autonomous in their learning, to make use of different learning strategies and to find encouraging techniques that might increase both their motivation and attitude towards learning a language.
- 2- The current study acknowledged a potential limitation by focusing on three specific universities in Egypt, Saudi Arabia, and Bahrain. These unique contexts

within ESP instruction could be influenced by various factors, including student varied language proficiency levels, different syllabi or teachers' individual teaching skills and expertise. To mitigate these imitations, the researchers maintained consistent communication throughout the intervention period. This allowed for ongoing discussion and development of CBI activities. They also focused on creating fresh and updated content to keep students engaged and ensure the activities remained relevant to the specific ESP fields.

#### Recommendations

Considering the results of the study, it is recommended that:

- More attention should be given to ESP learners' needs, lacks, and wants.
- The suggested CBI program should be incorporated in different courses using authentic materials like industry reports, technical articles, or lectures in the target language to foster students' different language skills.
- Learning about a subject that learners are interested in promotes their motivation levels for language learning.
- Develop engaging activities through designing tasks and activities that encourage active listening, critical thinking, and content exploration related to the ESP field.
- Differentiate instruction through adapting CBI activities to cater to visual, auditory, and kinesthetic learners.

- Creating a repository of CBI materials and activities tailored to different ESP fields and student levels.
- Using digital platforms like learning management systems (LMS) or online collaboration tools to support CBI delivery and student engagement.

#### **Suggestions for further research**

- Investigating the effect of using CBI on developing English language proficiency.
- Investigating the effect of using CBI on developing reading and writing skills.
- Exploring the relation between CBI approach and students' readiness for the labor market.
- A follow-up study to assess the long-term memory retention of content knowledge and the prolonged development of listening skills after the implementation of the CBI program .
- Investigate the impact of CBI teacher training programs on the effectiveness of CBI implementation.
- Exploring the effectiveness of collaborative CBI projects on enhancing students' research skills.

# References

- Abdalgane, M., Musabal, A., & Ali, R. (2022). Utilizing Dogme Approach to Promote EFL Learners' Oral Skills at the Tertiary Level. *Theory and Practice in Language Studies*, 13(1), 100–107. https://doi.org/10.17507/tpls.1301.12
- Abdulnaeim, N. (2021). Using an ESP program based on Dictogloss Strategy for Developing Tourism and Hotels Students' Listening Skills. *Journal of Educational Sciences*, 4(3).
- Ali, W. (2014). Motivations and attitudes of undergraduate students toward ESP classes in an Egyptian university [Master's

thesis, the American University in Cairo]. AUC Knowledge Fountain. <u>https://fount.aucegypt.edu/etds/1164</u>

- Alsamari, N. (2021). The Relationship between Language Proficiency Level and L2 Digital. *International Journal of Arabic-English Studies (IJAES)*, 21 (2).
- Al-Khatib, H. (2018). The role of English for Specific Purposes (ESP) in enhancing English language skills: A case study of Bahrain. *Journal of English for Academic Purposes*, 36, 93-102.
- Al-Mahrooqi, R., & Al-Bahrani, A. (2020). Integrating English for Specific Purposes (ESP) in vocational education: Perspectives from Bahrain. *English for Specific Purposes World*, 59 (3), 1-17.
- Al-Nouh, N., & Alsulaiman, F. (2023). Fostering collaboration between academia and industry in English for Specific Purposes (ESP) education: Insights from Bahrain. *ESP Today*, 11(2), 145-163.
- Alshayban, A. (2022). Teaching English for Specific Purposes (ESP) to Saudi Arabian Banking Employees. *Language Teaching Research Quarterly*, 27, 1-18.
- Alvi, H. & Bilal, S. (2021). Technology, Pedagogy & Assessment: Challenges of COVID19-Imposed E-Teaching of ESP to Saudi Female PY Students. Arab World English Journal (AWEJ) Special Issue on Covid 19 Challenges, (1), 334-353. Available at SSRN: https://ssrn.com/abstract=3851774
- Amiri, M. & Fatemi, A. (2014). The impact of conten-based instruction on students' achievement in ESP courses and their language learning orientation. *Theory and Practice in Language Studies*, 4 (10), 2157-2167
- Barnard, R. & Hawim, Z. (Eds.) (2018). English medium instruction programs: Perspectives from South East Asian Universities. London: Routledge.
- Brown, H., & Bradford, A. (2017). EMI, CLIL, & CBI: Differing approaches and goals. In P. Clem ents, A. Krause, & H. Brown (Eds.), *Transformation in language education*. Tokyo: JALT.
- Brown, H. D. (2014). *Principles of language learning and teaching*. Pearson Education.

- Brownell, J. (2018). *Listening: Attitudes, Principles and Skills* (Sixth Edition). Taylor & Francis.
- Buehl, J. (2022). *Graphical abstracts: Visually circulating scientific arguments*. In M. J. C. Hanganu-Bresch, The Routledge handbook of scientific communication (pp. 290-306). Routledge.
- Bula, O. (2014). Content-Based Instruction: A Relevant Approach of Language Teaching. *Innovaciones Educativas*, 15(20), 71–83. <u>https://doi.org/10.22458/ie.v15i20.515</u>
- Butler, Y. G. (2005). Content-based instruction in EFL contexts: Considerations for effective implementation. *Jalt Journal*, 27(2).
- Diab, A. (2021). An ESP Program Based on Cognitive Academic Language Learning Approach for Enhancing Academic Reading and Technical Writing Skills among Microbiology and Biochemistry Students. *Journal of Education Benha University*, 5 (91).
- Dudley-Evans, T., & St. John, M. J. (1998). Developments in English for specific purposes: A multidisciplinary approach. Cambridge University Press.
- El-Ghonaimy, T. M. (2015). The Effectiveness of Using Computer Assisted Language Learning (CALL) in Developing ESP Learners' Some English Writing Sub-Skills Introduction. *Journal* of Research in Curriculum, Instruction and Educational Technology JRCIET, 1(2).
- Field, J. (2008). *Listening in the language classroom*. Cambridge University Press.
- Gaffas, Z. (2019). Students' perceptions of the impact of EGP and ESP courses on their English language development: Voices from Saudi Arabia. *Journal of English for Academic Purposes*, 42.
- Gaiseanu, F. (2020). Attitude as an Expressible Info-Operational Reaction to a Perceived/Purposed Object/Objective. *International Journal on Neuropsychology and Behavioural Sciences (IJNBS)*, *1*(1). <u>https://doi.org/10.51626/ijnbs.2020.01.00002</u>
- Goh, C. (2017). *Teaching listening*. In The TESOL encyclopedia of English language teaching. Wiley.

- Graham, S. (2006). Listening comprehension: The learners' perspective. *System*, 34(2), 165-182.
- Habib, M. (2020). A Computer-Based ESP Program to Develop police College Students' oral communication Skills. *Journal of Faculty of Education Benha University* (124).
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centered approach*. Cambridge University Press.
- Ibrahim, A. (2022). Collaborative Research-Based ESP Program to Enhance University Students' Critical Writing and Reflective Thinking Skills. *Journal of education Mansoura University*, (119).
- Ibrahim, N. (2018). The Effect of ESP on Learning EFL Skills (A Case Study of Different Faculties at Red Sea University). *Education Journal*, 7(3). <u>https://doi.org/10.11648/j.edu.201807</u>03.14
- Jannah, R. et al. (2022). The effectiveness of task-based English language teaching and content-based instruction approaches on students' English listening comprehension. *Journal of Art, Humanity & Social Studies, 2 (2).*
- Jiang, L., Zhang, L. & May, S. (2016): Implementing English medium instruction (EMI) in China: teachers' practices and perceptions, and students' learning motivation and needs, *International Journal of Bilingual Education and Bilingualism*, DOI: 10.1080/13670050.2016.1231166
- Karimi, P., & Sanavi, R. V. (2014). Analyzing English Language Learning Needs among Students in Aviation Training Program. *Procedia - Social and Behavioral Sciences*, 98, 852–858. <u>https://doi.org/10.1016/j.sbspro.2014.03.491</u>
- Khan, A. (2019). Digital-Native Trends in Teaching ESP to Engineering Students in Saudi Arabia. *English Language Teaching*, 12(9), 1-13
- Khawaji, A. (2002). Transition of English Language Teaching in Saudi Arabia: A Critical Evaluative. *Arab World English Journal*, 13 (4), 265-280

- Lai, Y. & Aksornjarung, P. (2018). Thai EFL Learners' Attitudes and Motivation Towards learning English through content-based Instruction. *Malaysian Online Journal of Educational Scienes*, 6 (1).
- Lasheen, A. (2022). Effectiveness of Applying WebQuest Learning Activities in Developing Mass Communication Students' ESP Oral Communication Skills. Journal of Education Ain-Shams University, (46).
- Lee, J. F. K. (2017). English as a medium of instruction (EMI) in higher education: A critical review. *Language and Education*, 31(3), 199-213.
- Lee, Y.-S., & Villacorta, P. (2017). An Analysis of the Needs of Korean EFL Learners in the Collegiate Level. *Journal of Arts and Humanities*, 6(6). https://doi.org/10.18533/journal.v6i6.1199
- Lesiak-Bielawska, E. (2019). Technology in ESP. English for Specific Purposes World, 16(48).
- Lyster, R. (2017). Introduction to part I: SLA perspectives on learning and teaching language through content. In A. G. Llinares & T. Morton (Eds.), Language learning & language teaching. Applied linguistics perspectives on CLIL (Vol. 47, pp. 19–32). John Benjamins.
- Madrid, D. y Pérez Cañado, M. L. (2001): "Exploring the student's motivation in the EFL class", en E. García Sánchez (ed.): Present and Future Trends in TEFL, pp. 321-364. Universidad de Almería: Secretariado de publicaciones.
- Miyasako, N. (2018). Does Theme-based CBI in Active Learning affect university students' Intrinsic-Extrinsic Motivation and Listening Comprehension? *International Journal of Curriculum Development and Practice*, 20 (1), 49-62
- Montasser, R. and Althqafi, A. (2023). Saudi Students' Perception of ESP Courses in the Preparatory Year. *Journal of Education and Learning*, 12 (5). URL: https://doi.org/10.5539/jel.v12n5p166
- Nasim, S., AlTameemy, F. & Alhamod, A. (2022). Identifying Metacognitive Listening Comprehension Strategies of Saudi ESP Students. *FWU Journal of Social Sciences*, 16 (2), 68-85.

- Nasser Alharthi, A. (2020). Investigating the Challenges Faced by ESP Learners in Saudi EFL Context. *International Journal of English Language Education*, 8(2). <u>https://doi.org/10.5296/ijele.</u> <u>v8i2.16925</u>
- Portolés-Falomir, L. (2015). *Multilingualism and Very Young Learners*. Berlin: De Gruyter Mouton.
- Robinson, P. (1991). *ESP today: A practitioner's guide*. Prentice Hall.
- Rubin, J. (1994). A review of second language listening comprehension research. *The Modern Language Journal*, 78(2), 199-221.
- Salem, A. A. M. S. (2017). Engaging ESP Students with Brain-Based Learning for Improved Listening Skills, Vocabulary Retention and Motivation. *English Language Teaching*, *10*(12). https://doi.org/10.5539/elt.v10n12p182
- Salem, A. A. M. S. (2019). A Sage on a Stage, to Express and Impress: TED Talks for Improving Oral Presentation Skills, Vocabulary Retention and Its Impact on Reducing Speaking Anxiety in ESP Settings. *English Language Teaching*, 12(6). https://doi.org/10.5539/elt.v12n6p146
- Seif, L. (2019). A Proposed ESP On-Line Course for Developing Reading Comprehension Skills of Commerce University Students. *Journal of Faculty of Education Mansoura University*, 107 (6), 3-17.
- Shirav, A. (2023). Using CBI in ESP: The role of explicit instruction. *International Journal of Language and Literary Studies*, 5(3), 71–91. <u>https://doi.org/10.36892/ijlls.v5i3.1374</u>
- Sibulkin, J. (2018) Analysis on Content-Based Instruction Methods Influencing Student Outcomes in Higher Education. Open Journal of Social Sciences, 6, 176-194. doi: <u>10.</u> <u>4236/jss.2018.611013</u>.
- Song, Y., & Zhou, J. (2022). Revising English Language Course Curriculum Among Graduate Students: An EAP Needs Analysis Study. *Sage Open*, 12(3). <u>https://doi.org/10</u>. 1177/ 21582 440221093040

- Soroka, I. (2019). The Ways Of Researching ESP Learners' Needs As Seen By Teachers Of Ukrainian Universities. *Advanced Education*, 6(11), 4–9. https://doi.org/10.20535/2410-8286.120626
- Sundari, H. (2022). Analyzing Needs Of Online-Based EFL Academic Writing Course: Students' Voices In Course Design. *Research and Development Journal of Education*, 8(1), 172. <u>https://doi.org/10.30998/rdje.v8i1.11215</u>
- Yen, P., Hien, T., & Quyen, V. (2019). A review of factors influencing learners' gain of English proficiency . *Can Tho University Journal of Science*, 11 (1).
- Yulia, H., Agustiani, M., & Sumatera, S. (2019a). An ESP needs analysis for management students: Indonesian context. *Indonesian Educational Administration and Leadership Journal (IDEAL)*, 1(1).
- Zohoorian, Z. (2015). A Needs Analysis Approach: An Investigation of Needs in an EAP Context. *Theory and Practice in Language Studies*, 5(1). <u>https://doi.org/10.17507/tpls.0501.07</u>
- Zohrabi, M. (2014). A review of ESP in Iran: From the emergence to the present. *Theory and Practice in Language Studies*, 4(6), 1147-1153

## \*\*\*