

## Implementing ESP for the Construction Training Institute in Kuwait

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### ABSTRACT

The aims of this research include: 1. To identify the needs of the construction training institute (CTI) English curriculum for construction students, and 2. To develop appropriate English skills in reading, writing, listening, and speaking. This research draws inspiration from the instructional scaffolding approach established by Jerome Burner in the 1960s and has been advocated and cited in the Northern Illinois University Center for Innovative Teaching and Learning; this curriculum development process emphasizes guided instruction, class participation, group work, and independent practice. By scaffolding the learning process, instructors aim to provide comprehensive support for learners as they master new concepts and skills in English language proficiency relevant to the construction industry. The methodology gathered follows the ADDIE framework: analyze, design, develop, implement, and evaluate. Key considerations in curriculum development include ensuring alignment with ISO 9001: 2015 accreditation standards relevant to industry needs.

**Keywords** - Civil engineering, Construction, reading, writing, English for Specific Purpose, curriculum, ADDIE

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### I. INTRODUCTION

The Construction Training Institute (CTI) is one of the institutes affiliated with the Public Authority for Applied Education and Training in Kuwait (PAAET). It was established in the year 2000 to meet the needs of the Kuwaiti labor market for technicians in the construction field. The institute focuses on providing practical skills and hands-on training for students to excel in their careers in various industries. The learning strategy in the vocational institute has to be more focused than general. The curriculum has to be designed and tailored for the construction industry, having structural and integrated courses that are aligned with the accreditation standards ISO 9001: 2015. For this purpose, The English for Special Purposes (ESP) was designed. The ESP courses are utilized in vocational institutes for the following reasons:

1. Industry Relevance: ESP tailors the English language to meet the vocational terminology needed, the student's communication skills, and the text used in this field, enabling the student to communicate effectively in English within their professional text. 2. Practical communication skills: Practical communication skills such as listening,

speaking, reading, and writing are emphasized by applying ESP (Aughustina, 2014).

Nurpahmi (2016) simplified ESP courses as "an integrated series of learning experiences to lead learners to a particular state of knowledge." Therefore, the criteria of an ESP course must equip students with the language skills necessary for their field. The framework of the course must consist of needs analysis, course objectives, and curriculum development to determine the learners' needs in acquiring the language. Robinson (1991) said that "a basic ESP philosophy is to cater to specific needs of learners as much as possible" (Kaewpet, 2009).

The needs analysis is conducted to determine the student's English language needs, including language skills (e.g. reading, writing, speaking, and listening). To convey this, the construction training institute conducted several meetings with the English department to analyze academic and professional requirements. On the other hand, the course objectives are to define clear objectives based on the need analysis gathered from the construction training institute (CTI) students, which are focused on skills like reading, writing, listening, and speaking. The curriculum

development criteria encompass the framework of technical vocabulary, reading related texts, writing development, and listening within the field.

According to Jerome Bruner, his teaching approach uses instructional scaffolding that supports learners as they work towards mastering a new concept or skill (Bruner, 1973). When the method is applied to English ESP courses, it becomes crucial in guiding learners through the specialized language and content relevant to their field. As suggested by the NIU article (2016), it has to be carried out first by the instructor, then the class, and thirdly, the group does it. At the final stage, the independent practice stage reaches the individual again. This will establish clear and achievable learning objectives for the target ESP course. It must be aligned with the student's language skills and gradually scaffolds the learning process, starting with guided instruction and then transitioning to more independent learning reading to proficiency in the language.

## II. RESEARCH METHOD

The researchers adhered to the ADDIE Instructional Development Model (Gustafson & Branch, 2002) with certain modifications. The ADDIE framework, an acronym for Analyze, Design, Develop, Implement, and Evaluate, serves as a widely recognized guideline for the instructional development model, as noted by Gustafson and Branch (2022): "practitioners who frequently adapt and modify [Instructional Development Model] to match specific conditions," as can be seen in Fig. 1.

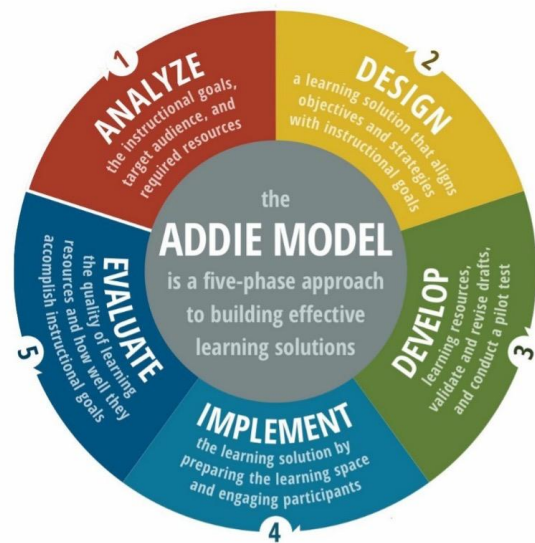


Figure 1. ADDIE INSTRUCTIONAL DEVELOPMENT MODEL

The researchers conducted and analyzed the initial phase. The application of qualitative data methodology did this step. The researchers interviewed the teachers, asked them questions, and asked them time to share their perspectives. Afterward, the researchers observed the students in their English classrooms. They collected some of the students' notebooks to analyze the students' comprehension and writing abilities and determine the student's English proficiency level.

The researchers then proceeded to design the course syllabus. After analyzing the gathered data, they assessed the students' needs and identified the students' English proficiency level to guide the syllabus design process.

The researchers followed the (i + 1) Input Hypothesis Method by the linguist Stephan Krashen, which posits that optimal learning transpires when the student is introduced to the material at his or her competency level before advancing to the next level (Krashen, 1982). The researchers integrated the (i + 1) method into designing the syllabus.

The third step involved developing course materials tailored for prospective engineering students. This textbook is designed for English for Specific Purposes (ESP) in engineering. The reading comprehension primarily emphasizes engineering

terminology, safety protocols essential for all engineers, and grammatical fundamentals.

Researchers created infographics to grasp students' attention and alleviate potential difficulties through visual aids. This pedagogical approach aligns with the findings suggesting a preference for visual learning styles among Saudi Arabian students, as Khalid Al-Seghayer wrote in his article (2021). Similarly, a study by Wu and Al-Rabah (2009) revealed the predominant visual learning preference is visual learning among Kuwaiti students (2009).

In the fourth stage, the researchers implemented a prototype version of the textbook. During this phase, feedback from the Science Committee in the English department was solicited and systematically analyzed to identify and address early challenges encountered during the prototype's deployment.

The final stage encompassed the evaluation of the textbook's efficacy for engineering students. The evaluation process was executed through a focus group session to elicit an in-depth conversation where they shared their opinion, experiences, and reactions. The focus group comprised ten men from the English department members and the researchers and were encouraged to speak freely, which led to an exchange of perspectives. Adopting the focus group methodology provided the researchers access to qualitative data to yield insight into the effectiveness of the instructional material.

### **III. RESULTS AND DISCUSSION**

The research analysis focuses on assessing the needs and materials for ESP courses in CTI. The initial stage involves a needs analysis to identify the target students' needs and learning requirements. Since ESP course materials are created for special purposes, they must be based on a thorough needs analysis, which sets ESP apart from other methodologies. (Hutchinson & waters, 1987). The researchers applied Stephan Krashen's (i+1) Input Hypothesis Method, which suggests that effective learning occurs when students engage with materials that match their competency level before moving on to a more advanced stage (Krashen, 1982). This approach was incorporated into the second stage, the

syllabus design. It encompasses a well-structured learning solution that aligns with the objectives and strategies needed for engineering students. The initial key components addressed while designing the ESP textbook were reading materials, ESP vocabulary, assessment exercises, and students' and teachers' roles. The six components illustrated by David Nuanan are the six components of effective language acquisition (Min, 2016).

In building a curriculum for ESP courses, the researchers followed the ADDIE instructional development model, which also encompasses the Nuanan component for effective language acquisition. Both components adhere to ESP course researchers' understanding of the learner's characteristics, needs, and motivations. The materials in ESP courses for construction engineers provided to students must focus on topics applicable to construction engineering.

The reading, writing, and vocabulary skills selected in the ESP courses are vital, for they should be relevant, engaging, and aligned with learners' goals. Previous researchers such as Goyol and Sunday (2020) indicated a gap in reading and writing proficiency among graduates of technical colleges, highlighting the necessity for skill enhancement. Therefore, the components in ESP courses are vital elements that should be relevant, engaging, and aligned with learners' goals. As defined by Nuanan (2004), this component pertains to the overall setting of tasks.

After evaluating the requirements, the next step is the development stage, as the ADDIE model indicates. This stage encompasses learning resources, validating and revising drafts, and conducting a pilot test. The curriculum must act as a framework for the student's development. Therefore, it must include essential skills for vocational education institutes, such as language input, grammar, and vocabulary. The aim is to improve learners' competencies in the workplace, as it specifically addresses their needs. (Guerid & Miami, 2017).

The fourth stage is the implementing stage, where the learning solution is sought by preparing the learning space and engaging participants. As Nuanan (2004) states, an effective implementation

should be interactive, adaptive, and responsive to students' needs. Applying this method of implementation and assessment will provide teachers with feedback, which helps to assess learners.

The final stage involved evaluating the ESP textbook's effectiveness for construction engineering students and its relativity. This evaluation was conducted through a focus group session to facilitate in-depth discussions, allowing the participants to share their feedback and opinions. The evaluation enables the participants to share their opinions and foster their perspectives about the book. The participant's evaluation creates a holistic approach to constructing the book and facilitating an effective education.

#### IV. CONCLUSION

This research emphasizes the critical importance of needs analysis and systematic development of ESP materials tailored for construction engineering students. By utilizing established methodologies such as the (i+1) input Hypothesis and the ADDIE instructional model, the study effectively addresses the specific needs and learning requirements of CTI students. The initial stage of curriculum development emphasized the significance of relevant content, such as reading materials, vocabulary, and assessment activities, ensuring alignment with the student's goals and industry demands.

The focus on engaging and applicable skills, particularly in reading and writing, responds to documented gaps in proficiency among technical college graduates, as noted by Gyole and Sunday (2020). The ongoing development and piloting of the curriculum, with consistent feedback from group evaluation, provide a comprehensive understanding of the textbook's effectiveness and relevance to students' needs.

Furthermore, the interactive and adaptive implementation strategies suggested by Nuanan (2004) enhance the educational experience by aligning the instruction with students' needs. Ultimately, this study adds to the ongoing questions and conversations about the effectiveness of ESP curriculum design, providing a strong framework that enhances learners' competencies in the workplace. Nevertheless, it fosters a more engaging and relevant learning environment. The

comprehensive feedback from the focus group and participants helped shed light upon instructional materials that enhance the overall teaching and learning experience.

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