# Khazar University

Faculty: Graduate School of Science, Art and Technology

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# **Master Thesis**

Dominant models of language assessment in Azerbaijani universities

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#### Abstract

The fundamental intention behind conducting this research was mainly scrutinizing the levels and types of questions administered in ESP courses such as 'Computer Engineering', 'Petroleum and Chemical Engineering', 'Civil Mechanical', 'Economics and management'as well as 'Psychology' taught at Khazar University over the last five years. In this regard, The purpose of the inspection was to carefully examine the questions taking into account Bloom's (1956) Taxonomy for learning objectives (i.e., remembering, understanding, applying, analyzing, evaluating and creating) and internationally acknowledged ESP standards. Purposefully a coding scheme was designated and the lowdown implied through results was revealed by virtue of Bloom's taxonomy along with ESP requirements. Outcomes of the trial received from 605 questions delineate the fact that majority of the employed questions are in accordance with remembering, understanding and applying levels regarded as lower-level cognition whilst creating, evaluating and analyzing levels considered as higher-level cognition categories were less employed in comparison. However test designers' very standpoint could be justified regarding their understanding of students' background education and psychological conditions. Additionally, it was revealed that analyzed test items are perfectly aligned with contemporary assessment criteria and meet the needs of ESP requirements.

Keywords: ESP, language assessment, evaluation, Bloom's taxonomy, higher-level cognition, needs analysis, test taker.

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# List of abbreviations

- EAP: English for Academic Purposes
- EFL: English as a Foreign Language
- EGP: English for General Purposes
- ELT: English Language Teaching
- EOP: English for Occupational Purposes
- ESL: English as a Second Language
- ESP: English for Specific Purposes
- EST: English for Science and Technology
- EVP: English for Vocational Purposes
- GE: General English
- NA: Needs Analysis
- PSA: Present Situation Analysis
- SE: Specific English
- TEFL: Teaching English as a Foreign Language
- TSA: Target Situation Analysis

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# **INTRODUCTION**

# **Background study**

The background study encompasses a comprehensive exploration of English for Specific Purposes (ESP), its developmental trajectory, and the underlying assessment principles influenced by Bloom's taxonomy. ESP, a specialized branch of English language teaching, is designed to cater to the specific linguistic needs of learners within their respective fields of study or professional domains.

By delving into the historical developments of ESP, we can trace its origins and subsequent evolution. The emergence of ESP in the 1960s was precipitated by the recognition of a pressing need for tailored language instruction for learners engaged in specialized fields. Factors such as advancements in science and technology, the proliferation of new professions and industries, and the global expansion of trade and commerce contributed to the growing demand for ESP training. Understanding the historical trajectory of ESP is crucial in unraveling its origins and subsequent transformations. The contextual backdrop that prompted the emergence of ESP in the 1960s, driven by the demand for specialized language instruction within various professional spheres, underscores the necessity for targeted and effective language training.

A fundamental aspect of ESP lies in conducting a meticulous needs analysis to determine learners' language requirements in various skill areas. This analysis serves as a guiding framework for designing targeted instructional approaches. It is within this context that the language skills pertinent to ESP, including listening, reading, speaking, writing, and vocabulary development, assume significant importance.

In assessing language proficiency in ESP, it is crucial to align evaluation practices with the specific objectives of the field. This necessitates a consideration of the principles embedded in Bloom's taxonomy, a well-established framework that categorizes cognitive learning domains. Adhering to this taxonomy ensures that assessments appropriately measure higher-order thinking skills, enabling learners to demonstrate their critical thinking, analysis, and synthesis abilities.

Despite the growing body of literature on ESP and language assessment, a research gap persists in the integration of ESP development, assessment principles informed by Bloom's taxonomy, and the specific linguistic needs of learners within their domains. This research aims to bridge this gap by providing an in-depth examination of the interplay between these factors, contributing to the theoretical and practical understanding of ESP pedagogy and assessment in a nuanced manner.

The background study endeavors to address a significant research gap in the field of English for Specific Purposes (ESP) and language assessment. While ESP has gained substantial recognition and has evolved over time, there remains a notable dearth of studies that comprehensively explore the intricate relationship between ESP development, assessment principles rooted in Bloom's taxonomy, and the specific linguistic needs of learners in their respective domains.

In assessing language proficiency in ESP, it is imperative to align evaluation practices with the distinct objectives of the field. Adhering to the principles underpinning Bloom's taxonomy ensures that assessments encompass a comprehensive measurement of higher-order thinking skills, enabling learners to demonstrate their critical thinking, analytical prowess, and ability to synthesize information effectively.

By shedding light on this research gap, the study seeks to advance the scholarly discourse on ESP and language assessment, paving the way for more targeted instructional practices and informed assessment approaches that align with learners' distinct needs and foster their linguistic proficiency in specialized contexts.

The title of this MA thesis is "Dominant Models of Language Assessment in Azerbaijani Universities". This study aims to explore the dominant models of language assessment used in Azerbaijani universities, with a specific focus on the English for Specific Purposes (ESP) classes at Khazar University.

ESP courses at Khazar University are designed to help students develop English language skills that are tailored to their specific academic and professional needs. The assessments used in these courses play a crucial role in evaluating students' progress and determining their level of proficiency. This study will analyze the mid-term and final-term exams used in ESP classes at Khazar University, with the goal of assessing the effectiveness of the current assessment models and identifying potential areas for improvement.

By examining the tests employed in these courses through the lens of Bloom's Taxonomy, this study seeks to determine whether the current assessment models align with the cognitive levels required to achieve the desired learning outcomes. Additionally, the study will investigate whether the tests used in ESP classes at Khazar University are valid, reliable, and fair measures of students' language proficiency.

The results of this study can inform the development of more effective language assessments in ESP classes at Khazar University, which could have important implications for students' language learning outcomes and their success in their academic and professional pursuits. Ultimately, this study seeks to contribute to a better understanding of the role of language assessment in higher education contexts, and to offer insights that can help improve language education practices in Azerbaijan and beyond.

In conclusion, this background study has emphasized the importance of assessment in the educational context and provided a brief history of ESP and its development. It has also explored the theoretical principles of assessment and the significance of Bloom's taxonomy in the assessment of ESP courses. However, there is a research gap in the evaluation of assessment tests employed within mid-term and final-term exams at Khazar University in the light of Bloom's taxonomy. Therefore, this study aims to address this gap by examining the effectiveness of the assessment tests used in ESP courses at Khazar University and evaluating them in the context of Bloom's taxonomy.

The next chapter of this thesis will present a comprehensive literature review that will provide an overview of the current research on the evaluation of assessment tests in ESP courses and the application of Bloom's taxonomy in language assessment. It will also identify the gaps in the literature and suggest a conceptual framework for the evaluation of assessment tests in ESP courses at Khazar University.

#### Statement of the problem and purpose of the study

The use of assessment tests within English for Specific Purposes (ESP) classes at Khazar University requires examination and evaluation to ensure that they align with the appropriate levels of Bloom's taxonomy. While there are various models of language assessment used in Azerbaijani universities, it is necessary to investigate the dominant models and assess their effectiveness in measuring students' learning outcomes in ESP classes at Khazar University.

This study aims to identify the existing models of language assessment used in Azerbaijani universities and evaluate their effectiveness in measuring students' learning outcomes in ESP classes at Khazar University, specifically by analyzing the alignment of test questions with Bloom's taxonomy.

The research problem is to determine the extent to which the current assessment tests used in ESP classes at Khazar University align with the appropriate levels of Bloom's taxonomy and whether alternative models of language assessment could be more effective in measuring students' learning outcomes.

The purpose of this study is to investigate the dominant models of language assessment used in Azerbaijani universities, with a specific focus on the English for Specific Purposes (ESP) classes at Khazar University. The study aims to analyze the types of assessment tests employed within mid-term and final exams of ESP classes at Khazar University, and to evaluate these tests in the light of Bloom's Taxonomy of Educational Objectives.

### Significance of the study

The study on analyzing the tests employed within mid-term and final-term exams of ESP classes at Khazar University is significant for several reasons.

Firstly, it can help to identify the strengths and weaknesses of the existing assessment models used in Azerbaijani universities. By examining the assessment tests used in ESP classes at Khazar University in the light of Bloom's Taxonomy, the study can provide insight into the effectiveness of the current assessment practices and identify areas for improvement. This information can be used to design more effective and efficient assessments in the future.

Secondly, the study can contribute to the development of ESP programs at Khazar University and other universities in Azerbaijan. By analyzing the assessment tests used in ESP classes, the study can identify the specific language skills that are being assessed and the extent to which these skills are being developed. This information can be used to improve the design and delivery of ESP courses, ensuring that they are more focused and relevant to the needs of students and employers.

Thirdly, the study can provide valuable information for other researchers in the field of language assessment. By examining the assessment tests used in ESP classes at Khazar University, the study can contribute to the ongoing debate on the most effective assessment practices for language learning. This information can be used by other researchers to build on the findings of the study and develop new approaches to language assessment.

Finally, the study can have wider implications for language education in Azerbaijan and beyond. By identifying the strengths and weaknesses of the assessment tests used in ESP classes, the study can provide valuable insights into the challenges facing language educators and learners in the country. This information can be used to inform policy and decisionmaking, helping to ensure that language education in Azerbaijan is more effective and better aligned with the needs of students and employers.

In summary, the significance of the study lies in its potential to provide valuable insights into the effectiveness of the existing assessment models used in Azerbaijani universities, contribute to the development of ESP programs, provide valuable information for other researchers in the field, and have wider implications for language education in Azerbaijan and beyond.

#### **Research questions**

This research aims to elucidate the answers to the following inquiries, which seek to streamline the process of attaining conclusive findings:

- 1. How bachelor and master students majoring in different fields are examined within the framework of ESP (English for specific purposes) at Khazar University?
- 2. Do the employed test questions effectively meet the specific requirements of English for Specific Purposes (ESP) at Khazar University?
- 3. Do the tests administered by the very university meet the approved, standardized requirements of international qualifications in the light of Blooms'Taxonomy?

At Khazar University, the examination process for bachelor and master students majoring in different fields within the English for Specific Purposes (ESP) framework involves a comprehensive assessment approach. The goal is to evaluate students' language proficiency and their ability to effectively use English within their chosen disciplines.

The examination process consists of multiple components. Firstly, there are language proficiency assessments that cover various aspects such as reading, writing, listening, and speaking. These assessments gauge students' overall understanding and command of the English language, including grammar, vocabulary, and communication skills.

In addition to general language proficiency assessments, subject-specific evaluations are implemented. These evaluations assess students' ability to apply their English language skills in their field of study. The assessments may involve tasks, assignments, presentations, or projects that require students to utilize English in a discipline-specific context. This ensures that students can effectively communicate within their professional or academic domains. Moreover, practical assessments may be employed to evaluate students' practical application of English language skills in real-world scenarios. These assessments often involve roleplays, simulations, or case studies that reflect the professional contexts students are preparing for. By integrating practical assessments, students can demonstrate their ability to apply English effectively in situations relevant to their future careers.

Regarding the second question, determining if the tests administered by Khazar University meet the approved, standardized requirements of international qualifications in the light of Bloom's Taxonomy requires a closer examination. It involves evaluating the alignment between the university's tests and the cognitive levels outlined in Bloom's Taxonomy. This evaluation ensures that the tests measure higher-order thinking skills rather than relying solely on rote memorization.

To assess this alignment, a comparative analysis can be conducted. This analysis would involve reviewing the learning outcomes, test items, and cognitive levels targeted by the assessments. It would assess whether the tests adequately measure students' higher-order cognitive skills, such as analysis, evaluation, and synthesis, in addition to lower-order skills like remembering and understanding.

Lastly, it is essential to evaluate whether the employed test questions effectively meet the specific requirements of ESP at Khazar University. This evaluation should consider factors such as relevance to the field of study, authenticity, task variety, task difficulty, content validity, and alignment with learning outcomes. By assessing these factors, the university can ensure that the test questions are tailored to the language needs and learning objectives of ESP, reflecting the specific requirements of students' respective disciplines.

Through a comprehensive analysis of the examination process, including the alignment with international standards and ESP requirements, Khazar University can continue to refine and enhance its assessments. This ensures that the tests effectively measure students' language proficiency, their ability to apply English in discipline-specific contexts, and their higher-order cognitive skills, ultimately preparing them for success in their chosen fields.

# Definitions of the key terminology

**Bloom's Taxonomy**: Bloom's Taxonomy is an educational framework that classifies learning goals and objectives. Developed in 1956 by Benjamin Bloom and his team, it categorizes cognitive complexity into six levels: Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating. This taxonomy provides a hierarchical structure for organizing different levels of thinking skills, which aids in curriculum design, assessments, and learning activities.

**Cognitive Complexity:** Cognitive complexity refers to the level of mental processing required to comprehend and engage with a task or concept. It encompasses various cognitive abilities, including remembering, understanding, applying, analyzing, evaluating, and creating. Tasks or questions with higher cognitive complexity demand advanced thinking skills, such as critical thinking, problem-solving, and higher-order reasoning.

**Higher-Order Thinking Skills**: Higher-order thinking skills (HOTS) are cognitive abilities that surpass basic knowledge recall. They involve critical thinking, analysis, evaluation, and creativity. HOTS go beyond surface-level understanding and necessitate complex mental processes, such as information analysis, connections, argument evaluation, and innovative idea generation. These skills are vital for deep learning, problem-solving, and the development of advanced cognitive abilities.

**Lower-Level Cognition**: Lower-level cognition refers to fundamental cognitive processes, such as basic knowledge recall, comprehension, and application of information. It typically includes tasks or questions that assess remembering, understanding, and applying concepts or facts. Lower-level cognition focuses on acquiring and demonstrating foundational knowledge and understanding before progressing to more complex cognitive skills.

Alignment: Alignment refers to the degree of agreement or correspondence between different elements in an educational context. In the context of your information, alignment specifically pertains to the consistency between test questions and Bloom's Taxonomy. An alignment analysis examines how well the questions align with the cognitive complexity levels of Bloom's Taxonomy, ensuring that the questions effectively assess the intended learning outcomes and engage students in the desired levels of thinking and understanding.

**Language assessment**: refers to the systematic process of evaluating an individual's linguistic competence or performance across various language-related tasks. It entails employing a range of methods and instruments to gauge different language abilities, including speaking, listening, reading, and writing. The primary objective of language assessment is to obtain an unbiased and reliable evaluation of an individual's language skills.

# Limitations of the study

The limitations of the study are important to acknowledge and provide transparency and credibility to the research. One of the main limitations of this study is the small sample size of

exam papers and questions. The study only covers 21 exam papers with a total of 605 questions from the ESP classes at Khazar University, which may not be representative of all ESP courses in Azerbaijani universities.

Another limitation is that the analysis of exam questions is based solely on the theoretical framework of Bloom's Taxonomy. While Bloom's Taxonomy is widely used in education and assessment, it may not be the only applicable framework for analyzing exam questions. Therefore, other frameworks could be used in future studies to provide a more comprehensive understanding of the effectiveness of language assessments in ESP classes.

Additionally, the study focuses solely on the analysis of exam questions and does not explore other aspects of language assessment, such as teacher feedback or student performance. Thus, the findings may not provide a complete understanding of the language assessment practices in ESP classes at Khazar University.

Finally, the study is limited to the specific context of Khazar University and may not be generalizable to other universities in Azerbaijan or other countries with different educational systems and cultures.

# Structure of the thesis

**Introduction**: This section will offer a comprehensive overview of the study, encompassing the study's context, problem statement, research objectives, research investigation, significance and justification of the study, scope and limitations, and the logical framework of the thesis. It will also introduce the research focus, which aims to investigate the prevailing paradigms of language assessment in Azerbaijani universities, with particular emphasis on ESP courses at Khazar University.

**Literature Review**: This chapter will provide an exhaustive synthesis of the scholarly literature pertaining to the dominant language assessment models in Azerbaijani universities and ESP courses. It will critically examine the theoretical underpinnings of language assessment, incorporating diverse assessment modalities, assessment criteria, and the pedagogical role of assessment in language acquisition.

**Methodology**: This section will delineate the research design, participants, data collection procedures, and data analysis methodologies adopted in the study. Ethical considerations and methodological limitations, such as the constrained sample size of 21 examination papers, will be conscientiously addressed.

**Results**: This chapter will comprehensively present the empirical findings, entailing a meticulous analysis of the assessment tests implemented in ESP classes at Khazar University. The findings will be meticulously illustrated through tables and figures, accompanied by a comprehensive analytical discussion.

**Discussion**: This chapter will engender a rigorous scholarly discourse by meticulously scrutinizing and interpreting the research findings, drawing upon pertinent prior studies to establish conceptual connections and elucidating any observed discrepancies. It will meticulously elucidate the far-reaching implications of the findings for language assessment practices in Azerbaijani universities and ESP courses.

**Conclusion**: This section will concisely summarize the principal research findings, expound upon their theoretical and practical implications, and offer concrete recommendations for future research endeavors. It will effectively reiterate the primary research inquiries and underscore the pivotal significance of the study concerning language assessment practices in Azerbaijani universities and ESP courses.

**References**: This section will encompass an all-inclusive compilation of the sources referenced and cited throughout the thesis, encompassing scholarly books, journal articles, and reputable online resources.

# **1. CHAPTER: LITERATURE REVIEW**

#### **1.1 Definitions of ESP**

The more scholars have aimed to give the explanation of the term ESP, the more definitions of it have come to the surface. Many scholars and linguists have attempted to identify ESP from the point of what it must or must not be, whereas we would like to focus on what it really means.

In the first place, Mackay and Mountford (1978; p 2) gave ESP a definition "clearly utilitarian purpose". According to them, the purpose of it could be academic, scientific or occupational. In their explanation, it was clearly stated that there is a certain environment and participants for ESP to take place. The target audience of it was adults since they were quite aware of what they were doing with English in specific settings and context.

Hutchinson and waters (1987) take ESP into consideration as a matter of approach rather than a product. They state that ESP is based on a question: what is the reasoning of this learner to learn a foreign language? Regarding this situation, Dudley-Evans and St John (1998) point out, the significance of needs in ESP is established within learning context where the language is wanted to be used.

Strevens (1988) determines ESP as including "absolute and variable features". According to Strevens, ESP context is designed to fulfill the certain needs of learners. Robinson (1991) determines two criteria; 1) ESP as a product is normally a 'goal-oriented' approach that is grounded on needs analysis. 2) ESP is usually taught to adult learners in various classes organized homogenously related to their academic lives or professional careers.

Schleppegrell (1990) proposes that the common ground found in all ESP programs is the fact that all of them are created for adult learners who are taking different specialization courses to meet specific needs of theirs.

Nevertheless, all of the definitions given above have weaknesses. Dudley-Evans and St John (1998) together have developed a whole definition of ESP which has outweighed the above given definitions.

- 1. ESP was developed to fulfill specific requirements of a particular group;
- 2. ESP employs fundamental approach and diverse tasks it caters to.

3. ESP concentrates on the terminology (syntax, vocabulary, and tone), conversation, and categories linked to these undertakings.

### Variable distinguishing characteristics:

- 1. ESP could be devised for certain fields;
- 2. ESP is frequently tailored for mature learners,
- 3. It may be an advanced academic institution or occupational environment.
- 4. It may also be suitable for learners at the secondary level.
- 5. ESP courses are in most cases designed for students from intermediate up to advanced.
- 6. Majority of the ESP classes require the primary knowledge of English but it could also be used for beginners.

Here what they want to affirm is the fact that ESP does not always reflect the content but rather is closely related to different concepts based on various disciplines and approaches regarding professions.

To come to conclusion, most definitions of ESP are intertwined yet there are slight differences among them. But with the help of all, a unique definition could be established; ESP is based on teaching specialized discourse to learners of English who are coming from different backgrounds with different specific needs. What ESP specialists do not agree upon is the fact that the types of language taught in different classes vary accordingly (grammar, lexis and so on). However it should be noted that since the introduction of ESP in 1960s, many definitions have been introduced and almost all of them are unequivocally bonded to the development of ESP. (Hutchinson and waters 1987)

# 1.2 Historical developments of ESP

# 1.2.1 The origins of ESP

There has been an unexampled evolvement of human activity since the beginning of the world. Some might be planned beforehand but some occurred definitely naturally. One of those phenomena is certainly our very topic ESP (English for specific purposes). As soon as the Second World War ended, there appeared immense advances almost in all aspects of the human life. Here emerged an unexpected expansion in different educational, academic and financial activities on a global scale. This process necessitated our world to be bounded by two different powers – technology and commerce – which generated a need for a worldwide language.

The reason why this heavy burden fell on the shoulders of English is because of the economic power The United States gained in the post-war world. English has sooner become the language of technology and commerce. It was not only prestigious to know the language but also a key to the currencies of commerce and technology.

there a question emerged: 'why do these people want to learn this language?' Business people that desired to sell their products, doctors who want to keep up with recent technological advances and myriad of students who are supposed to study course books and journals only available in English. English had now become the object of critical examination of the people who know the importance of knowing this language and why they are learning it. (Hutchinson and Waters 1987)

Historically the purpose of linguistics had been to demonstrate the use of grammar, but now thanks to the demand of new globalized world, the English language tailored to the specific needs of learners was the matter of subject. (Widdowson 1978)

The language we speak and write undergoes changes depending on the context. There are significant differences between the English of engineering and medical assessments. To put it short, one could say that English is open to be scrutinized in terms of specialist area of work or study. The guiding principle of ESP has become 'Tell me what you need English for and I will tell you the English that you need'. (Hutchinson and Waters 1987)

Novice revolutions in educational psychology also gave rise to the development of ESP, simply by emphasizing the significance of the attitudes of learners to the learning process (Rodgers, 1969). By means of this strategy, English courses could be designed in a way to not only influence their emphasized that ESP is not a monolithic phenomenon.

ESP has evolved into different phases in different countries at various times which means that millions of approaches could be identified and presented. There have been major shifts in the evolution process of ESP during history. Let us closely examine those concepts within register analysis.

In the 1960s and 1970s was particularly noted with the work of Peter Strevens, Halliday, McIntosh and Strevens (1964), Jack Ewer and Latorre (1969) and John Swales (1971). The main idea was that the register of Electrical Engineering constituted a different one from Biology or General English, the purpose of it was to identify grammatical characteristics of

them. The purpose was to create a syllabus which meets all the requirements of the grammatical structures such as conditionals, modal verbs, passives etc.

The last conclusion Hutchinson and Waters (1987) came was hugely influenced by the introduction of psychology into linguistics. Different learners were seen to make use of different needs and interests. To conclude in this part, ESP course should include all these forms. Creating specific courses to meet the needs of these individuals was the product of natural thinking.

#### **1.2.2 Development of ESP.**

From the beginning of 1960s ESP has gone through three underlying stages of development. It must be emphasized that ESP is not a phenomenon to be defined unequivocally. Since ESP has shown development in different phases at various speeds, distinguishable perspectives are found in terms of approaches. From Hutchinson and Waters point of view, different theories are developed out of conceptions categorized below;

#### **Register analysis**

This is the stage covered the period between 1960s and early 1970s which is noted on the name of Peter Strevens, Halliday, McIntosh and Strevens (1964), Jack Ewer and Latorre (1969) as well as John Swales (1971). The main principle here was that the register of English in Electrical Engineering was different from Chemistry or of General English. The goal of this process was to identify differences between various registers in terms of grammatical and lexical features. The purpose of this phenomenon was the fact that these ESP courses were more relevant to the learners' linguistic needs related to the reality of all specialization courses are adopted to meet the specific needs of learners so the irrelevant ones must be excluded.

According to Perren (1969), it is beneficial to recognize languages in different specialization areas within different registers in different settings they are used.

Lee (1976) explained two aspects regarding registers. First one is lexical analysis which is dealing the frequency of lexical items occurring in the speech. In terms of syntactic analysis Robinson (1980) suggested that ESP should apply special language and register.

However, there is no clear cut argument on how to approach and determine registers, yet there is a need for exact generalization. Within the help of register, the designers of curricula were able to tailor their programs to the specific needs of their learners. According to Candlin (1978), the main function of the language is to achieve its communicative purpose.

Widdowson (1979) defended a change from a quantitative approach from a qualitative approach. According to his perspective, the communicative approach to the teaching of languages has to be far from imperfection.

#### Rhetorical or discourse analysis.

From the perspective of Hutchinson and Waters (1987), there was a shift from register analysis to the scrutiny of discourse or rhetoric analysis. They emphasized the significance of how sentences are combined together to give a real meaning within the context.

Robinson (1980) takes register as a spoken interaction which is consisting of definite hierarchy.

Widdowson (1979) approaches to this idea that those group words should be taken as text not discourse because text permits to visualize them above the sentence level. Those devices which are referred by Widdowson are complex grammatical structures that make easy the way to encounter them in different fields of specialization.

In order to include different approaches, Hutchinson and Waters (1987) came to this generalization that the meaning and discourse must include rhetorical functions for communicative purposes.

According to Robinson, the most common rhetorical functions are generalized as description, definition and classification. The interpretation process of figures and the instructions regarding instructions are related to the rhetoric.

Mackay and Mountford (1978) included a few significant functions such as defining, comparing, identifying, organizing concrete phenomenon.

What is proper is the fact that ESP learners should encounter in courses where they are taught how to compile words to use their speech accurately and significantly to carry those rhetorical functions in certain settings. (Allen and Widdowson 1974)

#### **Target situation analysis**

ESP has finally shifted its attention to target situations. According to Hutchinson, a target situation is a phenomenon where learners are making use of specific language they are utilizing. He also said that to analyze specific language around ESP curricula, features which are common for all those situations have to be analyzed respectively.

According to 'Communicative Syllabus design' (1978) by John Munby, situation analysis must be scrutinized thoroughly. In terms of communication goals, he examines how specific language is communicated through speech, by means of either oral or written communication, and how those language skills possessed by learners function in the communicative speech.

As investigators call, needs analysis in the shape of target situations must be regarded as linguistic competence. From the point of linguistic performance, the very notion is defined as a competence to make use of language precisely, proficiently and fluently in a myriad of settings. Based on this idea, linguistic competence can be explained in terms of grammatical, pragmatical and communicative sub-competencies.

According to Douglas (2002) language performances are different in terms of various professions. Since it creates a huge amount of difference among different specializations, such as such as a learner who has a certain amount of knowledge about construction engineering might have less information about biology and others.

In order to create a certain curricula for ESP, it must be recognized and understood that all ESP factors are interconnected and have a potential to influence each-other.

#### 1.3 Study skills

The significance of mental processes cannot be denied within the process of second language acquisition. Hutchinson (1987) puts forward the idea that there are mental competences enabling people to draw certain interpretations from discourse. There is no such heavy burden on the visual surface of the language, so some strategies could be understood and an example of it could be the use of words identical in both L1 and L2 or other discourse markers to keep the conversation smooth and others. So he basically states that everything in the frame of teaching should aim to meet Learners specific goals. ESP curricula designers are stimulated to include learners to help them get on the way from the scratch.

On the basis of any designing process of a curriculum, needs analysis plays a crucial role regarding the specific needs of learners. The main significance of conducting a needs analysis lies in the fact that it enables us to identify the needs of learners on an individual level. The second notion here is that it gives them a certain understanding regarding student-related data, how to identify course objectives, how to make up certain decisions in terms of vocabulary, language procedures etc.

By means of this, curricula-designers are able to design materials that are match of students' credentials and other facts.

To put it into nutshell, the attention must be drawn to the fact that needs analysis plays a crucial role in terms of identifying learners' specific needs and designing individual syllabus.

The existence of situational analysis, needs analysis and special language or discourse analysis indicate the fact that there is a strong relational bond between content and the special language deserves a certain amount of attention in terms of designing curricula. The thing that is important here is the fact that ESP practitioners should be aware of the type of content they are referring to which holds value and importance in terms of linguistic pedagogy. Despite the fact that it could be used as a course material in ESP classes, it should be kept in the mind that those extracts are taken from different real sources which could be used inside and outside those classes in real life situations.

# **1.4 A learning centered approach.**

As a result of scrutinizing real language in different fields gave a chance to emerge to the development of ESP context. The underlying idea behind this occasion is the fact that various uses of language enable learners to use target language with the help of proper language patterns. The remarkable pattern here is the fact that ESP learners are supposed to take actions according to the materials adjusted to real life situations. The basic idea ESP instructors and curriculum designers hold to is the fact that they are not able to identify learner' needs without knowing exactly what they are going to do with the language.

The learners turn into the central part of a classroom and all the plans occur around the students, additionally all classroom sessions are revolving around learners specific needs.

# **1.5** General English (GE) and English for specific purposes (ESP) in theory and practice

Orr (1998) states the distinction between EGP and ESP as given below;

English for specific purposes as a natural phenomenon refers to the education taking place in higher school institutions that learners' specific needs cannot be easily identified and met.

Different linguistic elements that come together to create written and spoken discourse and the introduction to the sound and symbol system of English. English for Academic Purposes most often referred as EAP that is considered to be equal to ESP. The meaning of EGP might be considered less serious in terms of its definition regarding the part "general purposes". It is clear that ESP context is intertwined with general English. ESP is noted with adult learners since it is closely connected with various professional fields. To give an explanation to their connection, one should know that they coincide with each other despite the 'tough discrimination'.

If we compare some important aspects about ESP and EGP (GE), we will encounter these facts mentioned below;

- 1. ESP learners are mostly found to be adults who are mature enough to realize the significance of using specific language within various contexts.
- 2. The underlying reason of their learning the very language is to perform distinctive functions as their jobs require.
- 3. In different EGP classes, age of these learners range from people aged below 12 up to adults who are taking English classes for different purposes.
- 4. Originating from the goal of learning the language, the purposes of different instructions are determined;
- 5. Generally speaking four skills are equally emphasized.

But in ESP context, needs analysis plays a crucial role in creating syllabus properly. For instance, a call center operator should be trained in improving listening and speaking skills. Another example, a sales manager who is to get into interaction with different people needing persuasive and highly-convincing speaking skills need to promote the skill of speaking etc.

When it comes to a typical EGP class, teaching grammar is the main concentration of our concern. In the world of ESP, English does not aim to teach its learners only grammatical structures, at the same time it introduces its learners into the real world. There emerges a highly inspirational situation that a significant context is combined with English language so there happens to be a positive indication of favorable learning process.

With reference to the term "specific" in ESP, attention must be drawn to the fact that it does not only indicate English for specific purposes, but also English language at service of specific purposes. That is the reason why learners are able to use what they have learnt in these ESP classes outside the classroom. It gives the way to help them learn more of it with the current English language proficiency they have.

According to Hutchinson and waters (1987), distinctive difference between EGP and ESP is the enlightenment of learners on the basis of their needs.

Robinson states that 'language has the role of service rather than a product in an ESP classroom'. (1991)

Anthony puts forward the idea that we do not know definitely what is the starting or ending point of ESP and EGP.

To come to conclusion, by means of compatible language skills, examines through needs and adds fuel to the motivation of learners, context and the very subject matter. Establishing the course design and devising relevant curriculum are of great importance. Imprecise definitions often lead to misunderstandings of the topic as the comparison of two different fields contradicts each-other to get well-defined answers.

## **1.6 ESP and Language Skills**

While language skills are easily identifiable and distinguishable in a classroom setting, they are less separable in terms of ESP context. Newly adopted approaches as called "academic literacies" (Lee and Street 1998) state that they are always framed with contexts that are considered to be a part of social practices. Those practices are shaping different ways of our thoughts, emotions, belief systems that also give way to learner and teacher identities (Gee 1990).

As everybody knows, there are four underlying skills needed to be promoted by language instructors and teachers to develop language skills. A well-done needs analysis and assessment will shed a light upon your decision to promote which one in your ESP class. They will differ in context, change from person to person. One of the debatable questions here that has been discussed for a long time is whether to teach these skills in isolation or not. (Hutchinson and waters 1987)

# **1.6.1 ESP and listening**

Listening as a skill is usually the first rated skill to be avoided almost in all English programs. Everything that is coming out of your mouth might give its contribution to the learners listening comprehension. If you wish to be successful in it, you must be fathomable since the language is not understood is nothing but a piece of noise. That is the reason why you must reflect upon your own speaking before you begin teaching a speaking class. You might have an American accent while your students have already got used to a British accent. Of course you should not make them choose of the given above. Instead you can let them

expose to different accents as much as you can so their hearing is getting adjusted to various types of English language sounding differently.

## **Activities for Teaching Listening:**

You can give your students short lectures and get them improve their note-taking abilities. By simply giving them the vocabulary comprehension tasks beforehand, you can enable to them to understand everything they hear in a listening comprehension task.

Bring a tape recorder to the classroom and give them listening comprehension tasks about different topics. To continuously check their understanding, ask them randomly chosen questions by stopping it and feel yourself free to walk around the classroom.

You can read or simply paraphrase any text by yourself to let them see how different words are pronounced by native speakers.

## **1.6.2 ESP and reading**

It is often said that to be fluent with a language, one must do as much reading as possible. Even when your course is over, this is such a practical skill that will guide them in their language learning journey. To establish highly developed reading skills, one must improve both skills; decoding and examining, predicting and scanning etc.

To make it happen, the program you create must encompass two sorts of reading tasks: extensive and intensive reading. Intensive reading task is the examination process of a short passage that can help us to improve comprehension and grammar skills while extensive reading is the process of reading longer passages to improve focus span and get a detailed understanding of ideas.

Fluent reading often burdens us with a wide range of vocabulary since vocabulary development is an important aspect of reading proficiency. To make your students efficient readers and listeners of the language, you must get them build up a good vocabulary and read in English every day.

# 1.6.3 ESP and Speaking

The investigation process of English for specific purposes (ESP) is more concentrated on writing skills rather than speaking which is one of the factors giving its best contribution to the notion that written genres are of more significance than oral ones specifically in the professional world.

The other relevant factor could be the reality that obtaining written data and bringing it together is less difficult than any other language skills.

Nowadays thanks to the advances of technology, it becomes easy to collect speech samples. It has enabled researchers to collect any data regarding speech easier in compare with the past times which was highly-expensive and time consuming. At the moment, any data can be collected almost in any speaking environment with the help of a mobile phone recorder. (Hughes et al. 2010).

According to the explanation of Said Hofer (2001:134), English is mentioned as a "lingua franca" appearing mostly among non-native speakers. This means that English is usually used and spoken among people whose first language is not even English.

In terms of developing speaking skills, our needs analysis will help us to decide whether it is our primary goal to improve speaking skills or not. Taking into consideration some important factors deciding the fate of speaking class, the efficiency of the classroom speaking activities might be analyzed from different perspectives.

An example of it could be a class of 90 minutes with students around the number of 15. As a result, each of them will have the chance of speaking up to 5 minutes which is not a satisfactory amount of time.

In your case, you also might find it less practical since you could feel that you are spending less amount of time on developing their speaking skills. It might be found quite difficult to organize and facilitate discussion groups. But from a different angle, one could say that students are able to develop their speaking skills via the help of listening comprehension. The more they are exposed to listening English, the more they are able to improve their speaking skills which enable them to interact with native speakers.

Give students more opportunities to practice conversation. Teach them how to explain their opinions about different subject matters. Teach them some phrasal verbs and their importance in communicative speech. Teach them certain structures in case they do not understand something, they can easily elicit information. For example, 'Pardon me, Could you repeat what you have told once again?'

Role playing is also has an importance to trigger students to speak in the classroom, 'Role playing' is one of the effective conversation stimulators. You can choose a story according to the students' level, ask them to read at home and be aware of the context, divide roles among

students and get them to role play it. It will help them to comprehend the plot and develop a good habit of speaking through narration.

# **1.6.4 ESP and writing**

Another misconception about learning a language is that the thought held by most of the learners. That is learning a language through grammar but history has proved that only by memorizing grammatical structures, the one cannot express himself or herself in a spoken language fluently, that is why we should not heavily focus on teaching grammar in a classroom.

Learners must be always encouraged to use the language no matter how many mistakes they make. The teachers' work here is to find out all those grammatical mistakes and give their explanations.

## **1.6.5 ESP and vocabulary**

Vocabulary is recommendable to be taught in a context rather than forcing learners to keep long lists of words in mind.

To have a good understanding of what you read, they should have a background with a good deal of world knowledge because understanding any text whether it is in your native language or in a foreign language requires you not only language proficiency, but also background information.

Students sometimes might fall into the trap by thinking that they are supposed to understand every single word they encounter within a text. In reality it often causes misconception and misunderstanding since attempting to understand the text word by word slow down students' progress and influence the overall understanding of the learners badly. (Hutchinson and waters 1987)

# **1.7 Needs Analysis**

In an ELT world, needs analysis is considered to be a foundational basis of any ESP course. (Dudley-Evans and St John1998)

According to Brown (1995), the very term needs analysis is the activity of gathering information regarding ESP course and its practitioners to develop a curriculum to meet the certain needs of different people coming together as a group or a community.

Basturkmen (1998) states it as the process of detecting difficulties or problems simply by means of observation of participants in different situations via the help of interviews and questionnaires.

Richterch and Chancerell (1987) assure that the main goal behind needs analysis should not be only determining exact notions bearing significance to a certain degree, but also to find out what is inevitable important and vice versa.

Moreover, Soriano (1995) conveys that needs analysis conveys data collection and investigation of questions like 'what, how and where' respectively.

In terms of lacks and wants, needs analysis seems to be stuck between two ideas, what participants should learn and what is needed to be learnt respectively. There emerges an indicator showing the gap between the current proficiency of the learners and what they lack in terms of linguistic competence.

According to the definition given by Witkin and Altschuld (1995), needs analysis is a bunch of procedures carried out for the sake of taking decisions followed by actions about organizational improvement of sources. In consonance with this definition, needs analysis should be immersed with filling the gap between the problems presented currently and the ones wanted to be on the display.

To structure an ESP course, the first phase in developing a curriculum is Needs analysis. The selection of materials, methodology, evaluation and assessment are also different stages of this process. However those phases should not be taken separately. They are coinciding with one another in an independent fashion as noted by Dudley-Evans and St John (1998).

A detailed, multi-layered definition of needs analysis is given by Hyland (2006: 73):

'One key aspect of needs analysis is to understand the learners' goals and backgrounds. By understanding the learners' motivations and experiences, educators can tailor the course to better meet their needs. Language proficiency is another crucial factor in needs analysis. Educators need to assess the learners' language skills and adapt their instruction to meet the needs of learners with varying levels of language proficiency.

In addition to language proficiency, educators need to consider the reasons why learners are taking the course. For example, if learners are taking a course to prepare for a specific career, educators need to ensure that the course content is relevant to that field. Teaching and learning preferences are also important to consider in needs analysis. For example, some learners may prefer more hands-on activities while others may prefer a more lecture-based approach.

Another important aspect of needs analysis is identifying the situations in which learners will need to communicate. This can include workplace communication, social interaction, and academic communication. By understanding the learners' communication needs, educators can design instruction that helps learners effectively communicate in real-world situations'.

Definitions that have been introduced in this chapter are revolving around the similar terms such as "lacks", "wants", "necessities" etc. But the interpretation of these terms changes from one scholar to another. That is the reason why there is no precise definition of it agreed upon by many scholars. From the vantage point of Richards (2001), the term "needs", is relying on the judging perspectives of people. The participants of the process including different stakeholders may all have different perspectives on the subject matter.

While conducting a research work on the basis of needs analysis, extrinsic factors should be taken into account like customs and traditions or norms which have certain influential potential.

We can generalize the aims of needs within three points: Acknowledging participants as the language practitioners who are aiming to learn and make use of it; Finding out a way to know the best possible way to get language proficiency via the help of definite target learners; to detect an underlying possible way to gather our data by eliciting information in a learning environment.

Above all, it should be mentioned that findings of needs analysis are not first rate since how we elicit and give interpretation to the ideas change from one individual to another due to cognitional differences. (Robinson 1991, Dudley-Evans and St John, 1998)

In the second place, since we offer those questionnaires or quizzes to a great amount of people, it becomes feasible to get significant amount of information in order to start a new course with a newly-devised curriculum from the scratch. (Martin Hewings and Dudley-Evans 1996, Rea-Dicking and Lwaitama 1995)

In the third place, we have to ask these questions to make a difference between similar notions,

What is your expectation out of this course? Why do you want to learn the English? So there is a need to make a distinction between general needs and needs related to the course. Eventually, ESP teaching is more stimulating than the teaching of General English.

#### **1.7.1 Needs analysis models**

ESP is an umbrella term for different approaches to the language learning and acquisition. According to the classification by Jordan (1994) there exists to main approaches regarding needs analysis. They are Target-Situation Analysis and the Present-Situation Analysis respectively.

Needs analyses in an ESP context historically has been traced back a long time ago and has been continuously redefining and reshaping itself. Needs analysis was built around teachers' extrasensory perception until 1970s. This term was explicitly mentioned in 1970s in terms of target situation analysis.

The Target-Situation Analysis model was first introduced by Munby (1978) in his Communication Needs Process. This model was devised to introduce certain procedures for figuring out target situation needs. To understand what are the objectives of learners, certain amount of questions have to be asked taking into consideration each element separately. Here could be included participants, communication tools, identifying setting, being aware of the situation and event etc.

A few elements were added to Munby's model by Tarone and Yule (1989). They were global level, the rhetorical level, the grammatical-rhetorical level, and the grammatical level respectively. For designing syllabus, these two forms should be taken into consideration as data providers in analyzing the levels and target situations.

The Target-Situation Analysis model has been assured as pivotal since it plays a crucial role in the world of ESP despite the fact that it had been exposed to sharp criticism for not being stable.

Munby has given a number of needs profiles but has not drawn attention to various priorities. It makes difficult to utilize different profiles with various situations. (West, 1994)

Another underlying model in needs analysis is the Present-Situation Analysis. This idea was put forward by Richterich and Chancerel (1980). Here we take different elements from distinctive domains such as settings, workplace, participants, followed by chosen methods and strategies.

The purpose of taking the very action is to seek information on the methodology of teaching, views shared on language learning, society and cultural elements.

What the people learning the language required was to be aware of what they are going to do with the language exactly. The notion of needs analysis was first created by Council of Europe trying to have a standardization framework across different countries around the world.

Hutchinson and Waters (1987) also established the *present situation analysis* related to the real potential and limitations of the learning process, pervading attitudes or cultural norms and available sources are also included here. According to Munby (1978), the present situation analysis is compiled of potential constraints needed to be redefined and solved.

However needs analysis has to be taken as a system including both TSA and PSA together. (Robinson, 1991)

According to Swales (1988), task and syllabus designers are already late for taking some actions to deal with certain limitations.

In any language program or a course, the needs as a whole or the needs specific are language based ones. Naturally they could be rationalized in terms of aims and objectives that can build up a ground for the development of materials, learning activities, strategies for the assessment of evaluation. The main goal here is to find out what a program is running out.

The concept "pedagogic needs analysis" was first put forward by West (1998) three important aspects of needs analysis. Deficit analysis, strategy analysis and means analysis are all included here to compensate data to scrutinize it within a learning environment.

Hutchinson and Waters (1987) give a definition of the term "lacks" that is aligned with deficiency analysis.

Jordan (1997) states that the foundation of deficiency analysis created by two vital aspects. They are classified with two paradigms; 'present situation A' and "present situation B." For the purpose of learning a language, the method that learners are supposed to employ is called 'strategy analyses. This makes a clear understanding of learning tactics, advancing English and linguistic competences.

We should understand the fact that different learners learn in various ways. (Dudley-Evans and St. John, 1998) They take ESP into account not as a product but an approach to the teaching of language. (Hutchinson and Waters 1987)

The styles and strategies chosen by learners of the language help us to shape up our ideas by giving us a clear understanding of what learners' perception is towards it. (Allwright 1982)

#### **Means Analysis**

Means analysis attempts to examine some concepts related to logistics and pedagogy that laid the foundation of our discussion regarding language courses built around needs related matters. Dudley-Evans and St. John (1998: 125) propound the idea of means analysis as a data on our surrounding that the course will be carried out. One of the underlying ideas behind the means analysis is "to be aware of the fact that one method working well in one situation might not work in another one."

#### **Genre Analysis**

Genre analysis might coincide with discourse analysis. These two terms are clearly differentiated by Dudley-Evans and St. John (1998: 87). Discourse study refers to an investigation above sentence level which includes structure of a whole text, paragraphs or cohesive linkers. As a term, genre was introduced by Swales in 1981.

Bhatia, one of the investigators gives the definition of genre as the behavior in a professional setting. (Bhatia undated) Bhatia classifies four different competence areas;

1) Knowledge of the code is a must for the establishment for communication proficiency.

2) Acquisition of Genre knowledge is strongly related to the discourse community.

3) **Sensitivity to Cognitive Structures** is to make use of different phrases or lexical items with different meanings in specialized contexts.

4) Exploitation of Generic Knowledge is going one step beyond discourse analysis.

As Bhatia states, genre-based approach to the teaching of language is that learner learns language effectively only if it is aligned with a specialized context.

A comprehensive analysis was propounded by Dudley-Evans and St. John (1998:125). It encompasses a few points that we are going to introduce here. 1) Environmental situation is the information about the surroundings of learners. 2) Personal information about learnersThis is the subjective reasons influencing the ways learners learn. 3) Language information about learners-this is about current language proficiency of learners. 4) Learners' lacks- It is about the difference between what students have and what they need to have. 5) Learners' needs from course-they are about the expectations out of course.

#### **1.7.2.** Instruments for needs analysis

There are two commonly used tools to measure needs analysis. They are questionnaires and interviews that come to one's mind unequivocally.

According to the idea put forward by Kumar (1996), interviews have some advantages and disadvantages on its own. If we have a look at its advantages, we can see that it enables us to get a large portion of answers and information from different individuals giving their subjective opinions on the subject matter.

When it comes to interviews, they usually take researchers a lot of time and do not allow getting more information since we do not have opportunities to get into interaction with a lot of people in a short period of time.

Both of the instruments possess potential lacks. For instance, people are usually more prone to think attentively to give their perfect answers in a questionnaire before answering them. People are usually tend to tell the truth when it is a quick and unplanned response.

# The ESP teacher

It has been always a hot topic open do debate that who is supposed to teach English for Specific Purposes. Investigations were carried out to figure out who has adequate enough knowledge of language for teaching an ESP class?

The major goal of an ESP class is usually developing reading skills of learners. According to some scientists, students getting education in higher institutions most often found to be suffering from the limited range of vocabulary knowledge.

Gilmour and Marshal (1993) state that the majority of the problems arousing out of classrooms are usually vocabulary related and are not closely related to their professional fields.

Spack (1988) argues that problems of learners are usually related to their general English proficiency rather than a specific area.

Generally speaking, what a teacher is able to do for his or her students in a classroom environment is to create opportunities that they can learn by themselves. (Scrivener 2005)

We can affirm this by a statement given by Harmer (1998) that the classroom involves to have good management skills and motivating them continuously.

Additionally, learners must be taught different speaking strategies stimulated to improve their weaknesses to upgrade their language skills.

Harmer (2001) defines the teachers' roles within 8 different categories. They are a controller, organizer, assessor, prompter, participant, source, tutor and observer.

Based on his categorization, we should be able to go from one role to another quickly to get in harmony with the sequence of the events.

The reality is that teachers are required to have a good knowledge of language to do more than a job at the same time with good sociological and psychological management skills.

As Harmer affirms, Students want to feel safe and comfortable in a classroom environment, so teachers must not interfere a lot to the lesson process.

Within different phases of a lesson, different activities must be enforced and performed by a teacher. For a few moments, the teacher could be facilitator and for some an assessor.

Hutchinson and Waters (1987) confirm that ESP instructors should possess the same teaching abilities with General English instructors. Not only their related field, but also the psychological and sociological competences must be aware to them.

According to Robinson (1991) teachers are considered to be flexible referring to the competence to shift from one role to another. It is a general duty of an ESP teacher to teach ESP classes and dealing with different groups of learners with different learning abilities.

He also proposes the idea that ESP really means to teach your English knowledge by framing it to a certain context related to the learners' special fields.

A bunch of eminent scholars agree upon the fact that ESP teachers' work must include more than teaching a language. According to Dudley Evans and St. John (1998), a chosen term to define the subject matter is practitioner rather than a teacher. ESP teacher is a collaborator, material provider, course designer and an evaluator. On the basis of students' knowledge, teachers are no longer the experts of the knowledge since the learners of an ESP class know the content better than them. But the role of the practitioner is to manage the class to generate communication via the help of authentic materials.

Another role of the teacher is to make available the materials for use by providing the most suitable materials to need certain needs of learners to achieve proficiency.

Additionally, he or she has to continuously conduct researches on different techniques and strategies to improve themselves.

As Dudley Evans and St John (1998) indicates, The ESP teacher also acts as collaborator by means of collaboration and interacting with different specialists to gain more insights on the subject and syllabus.

When it comes to the role of evaluator, it is performed both in General English classes as well as ESP classes. Tests are heavily emphasized having of great significance. Tests are made use of conducting the assessment to evaluate the students' progress. Despite the fact that ESP courses cannot meet all the requirements of learners, their assessment is a must.

Evaluation process is a continuous assessment that must be conducted before and after the courses.

The ESP teacher and the duties it brings with itself are much more complicated than General English. The ESP teacher functions more than a teacher being in charge of providing materials, designing a course plan, and good management skills.

#### 1.8 Fundamental Considerations in Language Testing

The intricate relationship between language acquisition and the development of language skills is a recurrent theme in our extensive experiences. Language testing assumes a pivotal role in optimizing and enhancing both aspects by providing valuable insights into the efficacy of the learning and teaching processes. Language tests are commonly employed by educators to discern students' strengths and weaknesses, while also serving as a means to evaluate the effectiveness of various pedagogical approaches in language instruction.

The field of language acquisition has significantly contributed to the advancement of research in testing and evaluation (Bachman, 1990). It is crucial, therefore, to provide a comprehensive definition of the term "language ability," which proves elusive due to its

contextual variability and the inherent considerations of difficulty and complexity (Carroll, 1983, 1987).

Through the lens of language testing, educators gain invaluable insights into students' linguistic prowess, allowing for targeted interventions and tailored instructional strategies. Furthermore, language tests serve as a tool to assess the efficiency of different teaching methodologies, enabling educators to make informed decisions in optimizing language learning outcomes.

In light of the multifaceted nature of language ability, it becomes imperative to employ robust assessment practices that capture the intricacies of language acquisition and skill development. By adopting a comprehensive and nuanced approach to language testing, educators can foster a more accurate and holistic understanding of students' language proficiency.

Therefore, the dynamic interplay between language acquisition, skill development, and language testing underscores the significance of employing rigorous assessment methods that reflect the multifaceted nature of language proficiency. This not only enhances our understanding of learners' linguistic abilities but also informs instructional practices, ultimately contributing to the continual improvement and optimization of language education.

Language ability is fundamental in terms of test designing and practice in use. Over a period of time, there happened a gradual change and scholars began to frame it within a broader sense.

The terms are named as 'communicative proficiency' (Bachman and Palmer 1982), 'communicative language proficiency', 'communicative language ability' etc.

Testing, measuring and evaluation are often mistaken terms requiring clarification. In practice, they might underlie the same idea, however, when we seek for understanding in depth, we identify distinctive features and similarities among them.

Carrol (1968) defines test as a measurement tool ultimately makes inferences about features of specific notions.

Weiss (1972) states evaluation as a pile of collected data to take further decisions that is systematic in nature.

Testing does not primarily underlie evaluation since its functioning is descriptive unless the results evolving out of it used for further developments.

When it comes to assessing different skills, different mental concepts are taken into account such as observation and performance. All people who are using language one way or another exercise different language skills such as listening, reading, speaking and writing.

When we take an action to assess one's ability regarding these four skills, what we observe is performance whereas what we assess is competence. Performance might not be the true indicator of competence at times if it is accompanied by a bad night's rest, sickness, personal or external factors, etc.

Listening is neither visible nor audible as a skill in nature. It happens when auditory signals are transmitted to the brain through ears. It is orally almost impossible to define if students' minds process what they hear. Implementations we draw out of our observation might mislead us since they can simply pretend to be understanding by nodding or understanding in cases they don't.

To administer corresponding assessment tasks in listening starts with the identification of key criteria. Types of listening are defined and noted by Douglas Brown in 2004 as given below;

#### 1) Intensive.

To listen to a larger unit of a language on the purpose of identifying multiply linguistic elements such as intonation, discourse makers, words, phonemes etc.

#### 2) Responsive.

To listen to a shorter unit of a language such as greeting and give the response back in return.

#### 3) Selective.

As the name indicates, selective listening might refer to pay attention to the specific information such as looking for directions in a map exercise within a context.

#### 4) Extensive.

In its broader sense, it refers to listening something to get the general gist or extract main idea eventually requiring more elaborative listening proficiency.

Regarding the assessment of speaking, Brown (2004) propounds five kinds of speaking as given below.

#### Imitative

This is the type exactly functions as the name indicates via the help of imitation. The language user does not have to specifically add or produce additional anything. All the work put into practice is repetition of what has been said regarding a longer or a shorter piece of language.

#### Intensive

In contrast to imitative reading, doesn't highlight the significance of phonological aspects. The intercommunication with coequal is down to less since it functions as only giving responses to certain tasks. An example activity could be reading a short unit discourse or picture-cued tasks.

#### Responsive

Validity of the interaction is significant. The speaker is required to answer immediately. Replying back to a short stretch of a conversation could be an example to this type of speaking.

#### Interactive

Unlike responsive, interactive speaking involves frequently more than two or three people in a conversation. An interview, a role play or a discussion could be examples to it.

#### Extensive

Extensive speaking, as the name indicates is about a longer piece of a discourse or translation requiring strong language components as retelling a story or even oral presentations.

Writing is one of the primary skills in terms of language education and development. In consonance with Rao (2007), the objective of writing process in EFL world is double as it triggers thinking, stimulates producing and exercising language while ameliorating their ability to function better.

Bacha (2002, p.165) puts forward his attitude by categorizing it into four groups. They are rhetorical writing, process writing and English for specific purposes (ESP) as noted.

Controlled writing concentrates to focus on exercising grammatical perfection and linguistic elements.

Rhetorical writing comes to consideration when we consider not only the write's linguistic competences, but also actual writing figures dwelling above the sentence level.

Process writing is a complex system involving cognitive functioning on the basis of brainstorming, revising followed by proofreading at the end. This gives students some time to select themes and come to conclusions. (Raimes1991, p.410)

Reading comprehension and understanding of reading are almost considered to be the indicators of the same notion. It is obvious that one should have the background knowledge of the world to relate a new idea to the old one. Another term introduced by Smith is 'making sense' in terms of 'comprehension' and 'understanding'. (F.Smith 2004)

William Grabe (2009) strongly advocates and believes that reading as an activity, is an encoded interpretation process by means of printed knowledge.

On the purpose of becoming a prosperous reader, one should process the information displayed on a written material. To achieve it, one must have enough vocabulary and comprehend the arguments proposed, etc. (Jeremy Harmer 2001)

Humans exercise reading via the help of eyes and brain working out together. (Jeremy Harmer, 1991)

Reading can be categorized into different groups as shown below;

**Perceptive reading** means paying attention to the every single detail of the language within a given text. In this case, students more concentrate on separate words, punctuation and symbols. (Douglas Brown 2004)

**Interactive reading** refers to the interaction happening between different parts of the selected reading passage and the reader. This means to understand the certain part of a text, we relate it to the other parts and make a connection.

While **extensive reading** is frequently assigned for students to read outside a classroom hour. It might be a novel or a longer stretch of a story usually fitting up the students' interest to grab their attention and develop good reading skills in turn.

### 1.10 Assessing language skills in ESP

Assessment has a role of importance in terms of educational settings. The assessment might be informal appearing within the process of teaching and learning or formal given at the end of a course. Almost in all areas of education, assessment aims to take a decision about the rate of progress students achieve, designing curriculum and solving problems of teaching and learning. (Dr Suswati Hendriani 2013) Schoolchildren as well as the people who are getting higher education in tertiary institutions are assessed on a constant basis all around the world since the assessment is an indispensable part of educating and getting education. Tests should not be taken into consideration as simple assessment tools. For instance, job applicants are tested to see if they are matching for a job or tests are administrated to carry out entrance exams to educational establishments, etc.

Despite the fact that all the professionals from different fields are not creating or developing something from scratch, for example, linguists do not create a language but analyzing and investigating it whereas language testing is something about creating and developing test structures. (Glen Fulcher and Fred Davidson 2007)

Testing is an inseparable part of our teaching practice no matter if it is an obligation regulated by high authorities, traditionally approved validation process or a simple conviction. It does not only permit us to know if our teaching methods or strategies being put into practice achieve its aims and objectives or not.

Most scholars might come to an agreement on the very matter that ESP as a teaching process calls for a different approach by specifically chosen materials followed by a relevant methodology. (Mountford 1988: 76)

Primarily we can clearly see that ESP course is built around meeting learners' specific needs. But how can we make sure that those aims and objectives are fulfilled?

Students take testing as overwhelming and something putting limitations on their development. A well-prepared test could give them an opportunity to reflect on themselves and perform better in target situations by making adjustments and correcting errors.

Testing might be regarded as a pre-requisite to reflect upon students' current position to help them improve areas that are lack of proficiency in the future.

Apparently, if we test our architecture students on construction theories, or our pilots on airplane mechanisms, we would be losers.

First of all, we must realize the fact that tests are not administered to measure the knowledge of disciplines in different areas separately. Rather it is a means of checking the mastery of abilities framed to specific performances within subject areas. (Carroll 1980; 59)

In fact teachers frequently understand a great deal about what their students are capable of in terms of language skills without turning to formal tests. Because over a period of time they get the chance to observe the students engaged in different activities. This is also closely related to the classroom activities they are involved in. (Glen Fulcher and Fred Davidson 2007).

The main idea revolving around testing and assessment is the concept of validity. Historically validity has been comprehended as a means of finding out if a test "measures accurately what it is intended to measure" (Hughes, 1989: 22). When we administer a test, we aim or intend to appraise the validity of anything.

Even the most experienced teachers cannot go to the denial of the fact that test formats used in ESP are absolutely different from the ones used in General English classes. Designing test tasks adjusted to the ESP language skills is the key point we seek for to represent task features in Target language use (TLU) situations and show the language skills ESP test takers need to understand when specific purposes are accomplished (Douglas, 2000). Douglas also emphasizes the importance of simple features as the alikeness between target language use and the test task in terms of the degree of validity and the relatedness between the language proficiency and background knowledge of the language, (i.e. Engineering, Medicine and Tourism etc.).

Garcia and Fox (2020) emphasize the importance of test tasks needed to be implemented in target language uses. That is the reason why when ESP teachers write test tasks to measure language skills, the underlying question they should ask whether the test represents real language skills or not.

Unequivocally both grammar and vocabulary skills are essentially important and are of great importance in terms of learners' language comprehension skills. However, technical vocabulary often noted as 'technical' is considered as the primary skill (Coxhead, 2013; Sabieh, 2018) and regarding grammar which is not the main issue in ESP (Dudley-Evans & St John, 1998). But this fact is also obvious that it is unfeasible to think of learners' language competences without integrating grammar into the lessons. (Çelik, 2020)

The evaluation of writing and reading, are usually accomplished by influencing each other. (Brown, Abeywickrama, 2010).

ESP assessment demands us attentive considering examination followed by good teacher training and in-service teaching.

# 1.11 Objectives in Teaching ESP

Here we purposefully refer to Stern's (1989, 1992) language education objectives that had been put into categorization. According to his point of view, he made a distinction among four types of objectives; proficiency objectives involving the mastery of skills such as reading, listening, speaking and writing. Knowledge objectives take into account matters related to linguistic competences and norm as well as background information on culture. Affective objectives are related to the positive attitudes and perception to the process of getting language education.

The objectives listed above have been built around by coming to a common ground on the role ESP teachers perform. The underlying idea driven out of all categories is the duty carried by ESP practitioners which is the endeavor to do something useful by helping students to adopt into professional, vocational and workplace settings. In spite of distinctive nuances appear among objectives shown above are serving to make learners get easily into the specific environments. It means that by giving learners appropriate knowledge and skills required within their professional fields, we help them to survive in different contexts involving professional environments.

#### **1.12** Types of Language tests

Different test formats have come to emerge as a result of the development in the field of learning followed by the assessment of needs. Usually testing the language is thought to be about testing the knowledge of vocabulary and grammar. As Stern states, (1983, p. 340) "*if the ultimate objective of language teaching is effective language learning, then our main concern must be the learning outcome*".

Wigglesworth (2008, p. 111) also adds the definition of his; 'language measurement tasks are usually designed to take the measurement of learners' productive language skills through actions which are required to be skilled with in real life contexts'.

A performance test is a kind of test utilized for assessing how skillful the participants to perform certain tasks usually noted with a job or study requirements. (Davies et al., 1999, p. 144)

Performance test is devised to measure language skills could be found in real life. Performance tests are usually about tests of speaking and writing. An example of it could be speaking exams such us 'IELTS' measuring the real language competence of learners. Every single test has its own criterion and aims. An attainment test, also known as achievement or summative test, are created to measure the learners' language performance in terms of the programs taught in higher institutions.

In terms of pedagogy and practice, Brown (1994, p. 259) frames an achievement test as "tests which are constrained to a specific materials based on courses using own curriculum within a particular period of time".

As it is obvious from the name, diagnostic tests are basically designed to detect specific linguistic aspects. Basically Diagnostic tests give learners an opportunity to test their language knowledge, Let them reflect on their strength and weaknesses, give them a chance to begin learning by their own learning paths. (Prator's 1972)

The discrete-point is a kind of test made up of different sections made up of the same sort of tests. It functions as a discrete test measurement since it measures only one aspect of the language at a time like grammar, vocabulary etc.

Opposite to the discrete-point test, an integrative test is the one that demands to use different skills at the same time. A good example of it could be an essay-writing task since it involves the knowledge of grammar, vocabulary use, some rules of discourse etc.

From this vantage point, Harmer differentiated between discrete-point testing and integrative testing, drawing attention to the fact that students opt for the correct use of adjective in a discrete-point testing whereas in an integrative test, students or learners are expected to make use of different languages at any time (Harmer, 2001, p. 323).

Language Aptitude Test is a term refers to the combination of a few abilities; Phonological ability refers to the competence to define phonological issues like stress, intonation etc. Syntactic ability is the kind of an ability to identify various grammatical functions of words within a sentence. Psychological ability is the ability to elicit answers, inductive learning and memorization of anything related to language.

Placement test is designed to place students according to their levels during a course or a program. The term here is not used to refer to the content of the test nor the way it was constructed. (Richards 1989)

Distinctive testing procedures might be applied here by means of grammar test (either discrete or integrative), interview or even a dictation. In our country, in universities where the English is the medium of instruction, The English Placement (EPT) is being used for

undergraduate students to assess their English proficiency level and place them in relevant courses.

Proficiency Test is a type of test that has been devised to get adequate information about one's language knowledge. It is not particularly associated with any course instruction, but generally gives an idea about the general position of one's language.

The purpose of administering a proficiency test is to identify if this language ability correlates with the demands of language. (Valette 1977)

There are usually tests administrated at the end of the semester, course or a unit called progress test. A progress test is similar to an achievement test despite the fact that its scope is narrower and more particular in nature. (Richards 1989).

Instructors, teachers and examiners make use of these kind of tests determine drawbacks and weak points respectfully.

# 1.13 The impact of Bloom's taxonomy on assessment principles

Taxonomy as a term has been overused in the scientific world to define biological categorizations to reach the accuracy in terms of communication and shed some light upon the interconnection between different parts of plants and animals. To have the understanding of the very phenomena within the framework of educational domain, one is expected to internalize the theoretical objectives required in turn.

The taxonomy is deemed to be beneficial on providing significant insights to guide stakeholders in their particular fields for both identifying their lesson objectives and evaluating outcomes purposefully.

To develop such a classification called taxonomy came to the surface by the virtue of a meeting held by American Psychological Association Convention in Boston in 1948. This informal gathering gave the way to promote the establishment of such an enterprise through a system.

The classification was intended to be created on the grounds of logical, psychological as well as educational domains by emphasizing the significance of each item in particular. It is unfeasible to think of an educational objective without relating to the peculiarities of psychology caused by. As it is stated by Benjamin Bloom, The core essence of the taxonomy is reliant on cognitive domain comprising the action of recalling of knowledge followed by its recognition.

The fundamental goal in establishing that kind of taxonomy was mitigating the intricate phases of communication. Eventually, the primary idea behind the construction of the taxonomy was to facilitate the process of exchanging rationales and experience among educators, researchers, instructors and curriculum designers. As proof, since the terms "thinking" and "problem solving" are said to be controversial cognitive patterns highly considered to be vague to define, to make use of the taxonomy can make it easier to discern the disparities and apply them to different instructional programs. Overall, the taxonomy could function as an aid to enable them to accumulate different learning experiences taking places in various educational programs.

To establish a taxonomy requires one an ability to make choice of relevant symbols, by giving them unambiguous and navigable definitions and pinpointing target group supposed to take advantage of it as it can be seen in the book by Benjamin Bloom (1956). In order to apply it to the educational ground, the task is to select precise educational objectives representing different types of educational consequences. The major concept dealt by achievement testers and educational research workers is the product we conceive of to achieve over a certain period of time.

Again turning back to Bloom's ideas, we also encounter that "classification" and "taxonomy" are two different faces of the same coin despite the fact that they are used as if they are two peas in pod. To discern the difference between them, one must conceptualize the term classification as a compiling of arbitrary elements whereas in the framework of taxonomy such vagueness is avoided in terms of ordering real phenomena.

When we utter the phrase-educational objective, what we mean is our intention which defines our teaching and learning purposes through instructions. (Hirst, 1974; Ginther, 1972)

As stated by Lorin and Krathwohl (2001), generally speaking, there exist four kinds of knowledge we build our assumptions on. They are; Metacognitive, Procedural, Conceptual and Factual types respectfully.

Factual knowledge is deemed to be the collection of theoretical knowledge on individual elements such as terminology or specific information on some issues whereas conceptual

knowledge indicates more intricate and complicated in nature as it includes complex structures of knowledge.

Procedural knowledge refers to the wisdom of knowing how to do things appropriately by the virtue of techniques and skills, parameters and algorithms. In contrast, metacognitive knowledge is conceived of as knowing what we know or we possess regarding knowledge in simple terms.

Bloom's taxonomy comprises six distinctive cognitive phases in total. Creating, Evaluating, Analyzing, Applying, Understanding and Remembering from high-level complexity to the simplest one as delineated. The first mental phase defined as remembering refers to the retrieving of necessary knowledge out of long-term memory. Language can be communicated by means of different instruments such as oral interaction, written form or illustrated graphics and by giving instructions one can possibly digest the implementations behind it. This process is performed by cognitive ability called 'understanding' regarded as second dimension. Applying as the name indicates refers to handling matters via the help of experience gained beforehand within any condition while analyzing involves breaking the complex knowledge into chunks, figuring out the connection, acknowledging framed principles as stated by Krathwohl. Evaluation, considered as the higher dimension on the taxonomy's scale, correlates with either taking decisions or specific actions towards the subject matter. The top dimension portrayed on the taxonomy mainly defined as creating is to produce authentic work eventually coming out of creative ability. (Krathwohl, 2002)

# **1.14 Review of the previous studies**

Lin (2018) investigated the influence of English for Specific Purposes curriculum on Chinese Graduates' Career in. According to the implementations of his findings, it has been found out that participants in the research are suffering from the lack of preparation to function properly in their workplace due to the ESP related matters. Nevertheless their involvement might be constrained with a single -Africa, still it helps us to do some profitable work in the field of education. Most of them came to an agreement on the idea that the best way to improve conditions is enforced via the help of internships and cooperation to show teachers how to apply professional context to the classes.

Hidayatullah (2019) analyzed "the implementation of English for specific purposes" in his thesis. The purpose of his study was to find out the present implementation of English for Specific Purposes and the analysis of students needs to check if it met the requirements or not.

The outcome of the research is that all language skills are equally of importance for the learners though specific vocabulary and listening are the most advantageous.

Arfiansyah (2018) had an investigation on "Developing a model of ESP listening materials for students of tourism program at Indonesian vocational high schools through skill-centered approach" in his thesis work approved. According to the implementations of findings, the listening materials created for students of tourism program programs were based on skill-centered approach. As to the nature of their profession, they are supposed to get into interaction with a lot of native speakers so they should speak the language fluently and have good communication skills. In terms of needs analysis, the programs are advised to be adjusted to the interests of learners.

Kurniadhani (2020) conducted a research on the topic "Need analysis in ESP and ESP textbook evaluation in the department of medical". According to the implementation of the results obtained from these findings, it can be stated that the materials students need are generally about patient-doctor, doctor-nurse and the discussions on the international forum of doctors. Regarding the speaking skills, students are more in need of ability to talk to the patients, giving instructions to the medical staff and nurse etc. In terms of reading skills, they should be able to read and understand the medical journals and medical textbooks in terms of reading comprehension. When it comes to the students writing skills, they are supposed to be able to write medical reports, medical journals and lab report. For the last but not least, it was found that the medical students aren't satisfied with the ESP textbook.

Abedeen (2015) made an investigation on the topic "Exploration of ESP teacher knowledge and practices at tertiary and applied colleges in Kuwait". ESP teachers' knowledge and practices were investigated in several tertiary institutions in Kuwait, and revealed that teachers' functioning is generally constrained by the teaching context. The findings also uncovered a gap between their formal (theoretical) knowledge and their practical (Golombek 1998), or experimental knowledge.

Sterba (2014) had an investigation on the topic "Teaching Speaking in ESP classrooms". The objective of the investigation was to draw attention to the conversational activities in an ESP classroom and finding out a positive correlation between designing and putting into practice students' knowledge by enabling them to react to the situations in accordance with Hotel keeping and Tourism study program. Eventually the thesis attempted to give an answer to the effect of increasing motivation and stimulation on speaking activities in an ESP class.

Ouarniki (2012) made an investigation on the topic "The Current Situation of English for Specific Purposes Courses at University Level". Different contributions are taken into account by different specialists have been reviewed in this work. Students' strong desires to learn the language have been observed. One of the implementations of our findings is the fact there is no one elaborated English program designed perfectly. Last but not least, the teachers sent to the department of architecture must be qualified English instructors to cope with different contexts belonging to different fields.

Based on the research article "The Extend of Adaptation Bloom's Taxonomy of Cognitive Domain In English Questions Included in General Secondary Exams" by Raji and Al Mashhadani (2014), we can say that the significance of the study lies in its contribution to the assessment and evaluation of the educational system. The authors argue that the adaptation of Bloom's Taxonomy in exam questions is a crucial factor in promoting higher-order thinking skills among students, which is essential for their success in higher education and the workforce. The study is significant because it sheds light on the extent to which Bloom's Taxonomy is being incorporated into exam questions in the English language in general secondary education, which can inform future efforts to improve the quality of education and enhance the learning outcomes of students. Overall, this research article provides valuable insights into the current state of the educational system and highlights the need for further research and reform.

The study by Rahman et al. (2019) examined the use of Bloom's Taxonomy and rulesbased question analysis to evaluate the quality of examination papers. The authors argued that the use of Bloom's Taxonomy can improve the quality of exam questions by providing a framework for assessing the cognitive levels of questions. The study found that a majority of exam questions fell within the lower levels of Bloom's Taxonomy, indicating a need for greater emphasis on higher-order thinking skills. The significance of the study lies in its contribution to the development of a systematic approach to evaluating the quality of examination papers. The use of Bloom's Taxonomy and rules-based question analysis provides a standardized method for assessing the cognitive levels of exam questions, which can be used to improve the quality of assessments and promote higher-order thinking skills among students. The study has important implications for educators, examiners, and policymakers who are involved in the development and administration of examinations.

The article "Language assessment through Bloom's Taxonomy" (Yildiz, 2018) emphasizes the importance of incorporating Bloom's Taxonomy into language assessments. The author argues that language assessments that utilize Bloom's Taxonomy can more accurately measure students' language proficiency and provide a more comprehensive understanding of their abilities. By analyzing language assessments through Bloom's Taxonomy, language teachers can identify areas where students excel and areas where they struggle. This can help teachers to tailor their instruction and provide targeted support to students who need it. In conclusion, the use of Bloom's Taxonomy in language assessments has significant implications for language education and can lead to more accurate and meaningful assessments of students' language proficiency.

The study conducted by Al-Musallam and Mahmoud Al-Khatib (2016), an analysis of the tenth-grade English language textbooks in Jordan, specifically focusing on the level of cognitive difficulty of the questions based on the revised Bloom's Taxonomy. The authors aimed to determine the extent to which the textbooks used higher-order thinking skills in the questions presented to students. The findings of the study showed that the majority of the questions were focused on lower-order thinking skills, with only a small percentage of questions requiring higher-order thinking skills. The authors discussed the implications of these findings for language education in Jordan and the need for educators to design and use materials that promote higher-order thinking skills.

In conclusion, Al-Musallam and Al-Khatib's study provides valuable insights into the level of cognitive difficulty of English language textbook questions in Jordan based on Bloom's Taxonomy. Their findings highlight the need for educators to consider the cognitive level of questions they use in language teaching and to promote higher-order thinking skills among students.

The study by Ping Wang (2016) explores the extent to which adult teaching methods in China are consistent with Bloom's Taxonomy. The author analyzes the content of the adult education curriculum and the teaching methods used in China and compares them to Bloom's Taxonomy, with a focus on the cognitive domain. The study found that the teaching methods used in adult education in China tend to emphasize lower-level cognitive skills, such as knowledge and comprehension, while neglecting higher-level skills, such as analysis, synthesis, and evaluation.

This study is significant because it sheds light on the need for more emphasis on higherorder thinking skills in adult education in China and suggests that Bloom's Taxonomy can serve as a useful framework for designing and evaluating adult education programs in China. The study by Marjan Gharagozloo and colleagues in 2017 provides valuable insights into the use of Bloom's Taxonomy in the context of teaching histology to graduate students. The study aims to examine the effectiveness of Bloom's Taxonomy in promoting higher-order thinking skills among students. By analyzing the assessment questions and student responses, the authors found that the use of Bloom's Taxonomy had a positive impact on promoting higher-order thinking skills, such as analysis, synthesis, and evaluation. Moreover, the study highlights the importance of aligning course objectives, instructional strategies, and assessment methods with Bloom's Taxonomy in promoting effective learning outcomes. Overall, the study has significant implications for the design and implementation of effective teaching methods and assessments in the context of graduate-level courses in histology and other related fields.

Based on the title of the study, "Relationship between examination questions and Bloom's taxonomy," by Ibrahem Alzahrani and Abu-Hilal(2008), it can be inferred that the study explores the correlation between the level of cognitive complexity of examination questions and Bloom's taxonomy. The significance of this study lies in its potential to improve the quality of examinations by aligning the cognitive complexity of questions with the learning objectives of the course, as outlined by Bloom's taxonomy. By doing so, the study can contribute to enhancing the validity and reliability of examinations, as well as promoting deeper learning and critical thinking among students.

Additionally, the study can serve as a guide for educators in designing effective assessment strategies that correspond with the intended learning outcomes.

The research undertaken by Kandır and Karaman (2016) offers a meticulous analysis of teacher selection exams in Turkey, scrutinizing their congruence with the Revised Bloom's taxonomy of educational objectives. The study elucidates the paramount importance of these exams as an assessment instrument for evaluating teacher competencies and identifying prospective candidates for teaching positions. The authors assert that the exams should be meticulously crafted, grounded in a comprehensive understanding of the proficiencies and knowledge requisite for effective teaching and learning, as delineated within Bloom's taxonomy. The study proffers valuable insights into the prevailing state of teacher recruitment in Turkey and proffers recommendations for enhancing the quality and efficacy of teacher selection exams.

Similarly, the inquiry conducted by Malik and Ahmad Saeed (2015) probes the significance of Bloom's taxonomy in revolutionizing pedagogy through assessment. The author posits that the taxonomy provides an encompassing framework for educators to devise learning objectives that align with higher-order cognitive skills indispensable for students' triumph in the 21st century. The article delves into the historical underpinnings of Bloom's taxonomy, expounds upon its six cognitive domains, and scrutinizes its revised iteration. Moreover, the author expounds upon how teachers can effectively leverage the taxonomy to evaluate student learning and provide feedback that nurtures elevated thinking capacities. The article culminates by underscoring the paramount importance of integrating Bloom's taxonomy into pedagogical practices to reshape education and equip students with the proficiencies necessary to confront future challenges.

Furthermore, the research article authored by Mahroof and Saeed (2015) endeavors to evaluate the caliber of examination question papers employed by the Board of Intermediate and Secondary Education in Pakistan by employing Bloom's Taxonomy and Item Analysis. The significance of this study lies in its contribution to the ongoing discourse surrounding the effectiveness of examination papers in gauging students' cognitive aptitudes and the imperative for appropriate assessment tools. The study's findings yield profound insights into the caliber of examination questions and suggest avenues for enhancing the assessment process. By employing Bloom's taxonomy and conducting item analysis, this research augments the existing body of knowledge and proffers practical recommendations for ameliorating the quality of examination papers to accurately gauge students' cognitive abilities.

In summation, these studies collectively underscore the paramount importance of aligning assessment tools, such as teacher selection exams and examination question papers, with educational objectives and Bloom's taxonomy. By emphasizing the criticality of this alignment, the research accentuates the urgency for robust assessment practices that foster higher-order cognitive skills, foster excellence in education, and equip students with the dexterity needed to tackle future challenges.

Based on the investigation by Gürsoy and Yaman (2021), we see that the significance of the study lies in its analysis of the alignment between the English language textbooks' final examinations and revision questions and the revised Bloom's Taxonomy. The study highlights the importance of ensuring that exam questions are designed to assess students' higher-order thinking skills, as recommended by Bloom's Taxonomy. The findings of the study can inform

curriculum developers, teachers, and textbook authors on how to improve the quality of examination questions by incorporating Bloom's Taxonomy principles.

This research contributes to the literature on the use of Bloom's Taxonomy in language assessment and has practical implications for English language teaching and learning.

The study provides an in-depth analysis of the use of Bloom's Taxonomy in various educational contexts, including assessment, teacher recruitment, and curriculum design. The significance of Bloom's Taxonomy lies in its ability to provide a framework for educators to design and assess learning objectives that promote higher-order thinking skills. The authors of the different studies mentioned include (Aydin, 2019; Aziz and Yaseen, 2015; Salehi et al., 2018; Song and Zhang, 2019; Zaidi et al., 2016; and Zaman and Qasim, 2018). These studies emphasize the importance of aligning assessment questions, curriculum design, and teacher training with Bloom's Taxonomy to improve the quality of education and promote better learning outcomes for students.

The research conducted by Tampio (2011) argues that the use of Bloom's Taxonomy in American education has been misdirected and led to a narrow focus on cognitive skills at the expense of other important aspects of education, such as character development and socialization. Tampio argues that Bloom's Taxonomy has been misused as a tool for assessing individual cognitive ability and promoting academic competitiveness rather than fostering the broader aims of education.

The significance of the study lies in its critical examination of the limitations of Bloom's Taxonomy in promoting a well-rounded education and its call for a reorientation of American education towards a more holistic approach that values not only cognitive skills but also character, socialization, and emotional development.

The study undertaken by Ullah, Nisar, and Iqbal (2020) investigates the degree of alignment between physics examination questions at the secondary level and the various levels of Bloom's Taxonomy. The authors contend that employing Bloom's Taxonomy can result in a more comprehensive assessment of students' cognitive abilities and offer more meaningful feedback to enhance their learning outcomes. The study underscores the significance of aligning examination questions with the levels of Bloom's Taxonomy to enhance the quality of education. The findings suggest that a considerable proportion of physics examination questions at the secondary level in Pakistan predominantly fall within the lower levels of Bloom's Taxonomy, which may not adequately evaluate students' higher-order

thinking skills. Consequently, the study recommends providing teachers with training to develop and employ examination questions that assess higher-order thinking skills, thereby improving the overall quality of education.

In a separate research endeavor, Osman and Yahya (2016) propose an automated classification method for exam questions based on Bloom's Taxonomy. The authors argue that conventional classification methods often exhibit subjectivity and may result in inconsistencies in assessment. They utilize a machine learning approach to categorize exam questions by considering features such as part of speech, sentence structure, and the presence of keywords associated with Bloom's Taxonomy. The study demonstrates that their method achieves a high level of accuracy in classifying exam questions, presenting a more objective and consistent approach to assessment.

Furthermore, the article authored by Lee, Kim, and Yoon (2015) offers an analysis based on the revised Bloom's Taxonomy, examining the cognitive demands of primary science curricula in Korea and Singapore by scrutinizing the cognitive levels of objectives and assessment items. The authors identify similarities and differences between the two curricula and propose strategies for enhancing the cognitive level of objectives and assessment items. The study showcases the utility of the revised Bloom's Taxonomy as a tool for analyzing curricula and assessment items, facilitating curriculum improvement and alignment with desired cognitive outcomes.

Another noteworthy study conducted by Hidayah and Kusumah (2018) demonstrates the efficacy of utilizing Bloom's Taxonomy as a framework for developing Higher-Order Thinking Skills (HOTS) questions in the domain of Probability Theory. The authors present a systematic approach to crafting HOTS questions based on Bloom's Taxonomy, which can be adapted to other subjects and educational levels. The study emphasizes the significance of incorporating higher-order thinking skills within the curriculum and assessment process, fostering critical thinking and problem-solving abilities among students.

The study conducted by Benhammadi (2021) seeks to assess the Algerian EFL Baccalaureate exam through the lens of Bloom's Taxonomy's cognitive domains. The study's significance lies in providing insights into the exam's ability to measure various levels of cognitive skills, including knowledge, comprehension, application, analysis, synthesis, and evaluation. By evaluating the exam questions, the study offers valuable guidance to teachers

and examiners in designing and evaluating questions that effectively assess higher-order thinking skills and promote deeper learning among students.

In a similar vein, the article by P.J. Hodkinson and L. Hodkinson (2016) examines the cognitive demands of the Leaving Certificate biology examination papers in Ireland, employing Bloom's Taxonomy. The research investigates the extent to which the exam questions align with different cognitive levels, shedding light on the cognitive rigor of the assessment. This analysis contributes to the understanding of the examination's cognitive demands and aids in identifying areas for improvement.

The research paper by Huseyn Öz (2015) explores the use of Revised Bloom's Taxonomy to evaluate the assessment practices of pre-service English as a Foreign Language (EFL) teachers. The study emphasizes the importance of integrating higher-order thinking skills into assessment practices and preparing pre-service teachers to effectively incorporate these skills in their future teaching endeavors. By utilizing Bloom's Taxonomy, the research provides a structured framework to assess the cognitive complexity of assessment tasks and identifies opportunities to enhance pre-service teacher education programs.

Furthermore, the article by Gul, Kanval, and Khan (2020) investigates teachers' preferences for utilizing Revised Bloom's Taxonomy in their instructional practices based on a survey conducted in Pakistan. The findings indicate that teachers exhibited a strong inclination toward incorporating the taxonomy in their teaching approaches, as they believed it facilitated a deeper understanding of their students' learning processes.

Lastly, the article by Barak (2013) delves into the utilization of cognitive knowledge and problem-solving taxonomies in the context of engineering and technology education. The author argues that educators in these fields must possess a comprehensive understanding of these taxonomies to design effective teaching strategies and assessment methods. The article reviews various taxonomies, including Bloom's Taxonomy and the SOLO taxonomy, and offers recommendations on how to integrate these frameworks into engineering and technology education, fostering a more holistic and effective learning experience for students.

The research paper written by Langrish and Sutcliffe(1998) discusses the use of Bloom's Taxonomy in assessing the engineering curriculum. The authors use the taxonomy to analyze the cognitive level of questions used in engineering exams and coursework, with the aim of identifying areas where the curriculum may need improvement. The paper also discusses the challenges and benefits of using Bloom's Taxonomy in this context.

Overall, the authors find that the taxonomy provides a useful framework for analyzing the curriculum and identifying areas for improvement.

The article by Khan, Hafiz and Inamullah (2014) analyzes the distribution of lower-order and higher-order questions in the question papers of English, Mathematics, and Science at the secondary level. The study was conducted in Pakistan, and the researchers used Bloom's Taxonomy as a framework for analyzing the cognitive levels of the questions.

The use of Bloom's Taxonomy in exam paper assessment has been the focus of research in recent years, with studies exploring the different levels of the taxonomy in relation to the complexity of questions asked in various subjects. One such study is conducted by Syed Tahir Hijazi and colleagues, published in 2015. The study aimed to assess the extent to which Bloom's Taxonomy is applied in exam papers assessment in Pakistan, and the findings suggested that lower-order thinking skills were more frequently assessed than higher-order thinking skills in exam papers across various subjects. The authors emphasized the need for teachers and examiners to be aware of the importance of higher-order thinking skills in assessment and to design exam papers that reflect the full range of Bloom's Taxonomy levels.

The investigation authored by Kandemir (2019), analyzes the 2016 university entrance exam (LYS) and the high school entrance exam (YGS) physics questions in Turkey according to Bloom's Taxonomy. The study aims to determine the cognitive level of the questions and their compatibility with the intended learning outcomes of the curriculum. The analysis revealed that the majority of the questions assessed lower-order thinking skills, while higherorder thinking skills were not adequately represented. The study emphasizes the importance of aligning the assessment tools with the intended learning outcomes of the curriculum to promote meaningful learning.

Shoaib (2018) aimed to evaluate the entrance test conducted by the Education Testing and Evaluation Agency (ETEA) for medical colleges in Pakistan. Using Bloom's Taxonomy, the study analyzed the test questions and found that most of the questions tested recall rather than higher-order thinking skills. The author suggested that the test should include more questions requiring analysis, synthesis, and evaluation to better assess the critical thinking abilities of the candidates.

The study by Yalda Noroozi (2021) aimed to investigate the cognitive levels of reading comprehension questions in teacher-made achievement tests by applying the Revised Bloom's Taxonomy. The findings indicated that the majority of the questions were at the recall level,

which indicates a lack of higher-order thinking skills being tested. The author suggests that incorporating questions that require analysis, evaluation, and creativity could enhance the validity and reliability of the tests.

The article authored by Sangodiah, San, Fui, Heng (2021) analyzed various unsupervised term weighting methods and identified the optimal baseline variant for question classification based on Bloom's Taxonomy. The study found that using the Tfidf weighting method with Porter stemming and stop words removal produced the most accurate classification results. The authors suggest that their findings can be used to improve automatic question classification systems in various educational settings.

The inquiry by Mohamed, Zakar and Alshaikhdeeb (2019) proposes a method for automatically classifying examination questions according to Bloom's Taxonomy cognitive level using a combination of syntactic and semantic features. The authors suggest that this method can be useful for educational assessment and curriculum design by identifying the distribution of questions across cognitive levels and helping teachers and educators to balance the difficulty and diversity of exam questions.

#### **1.15 Originality of the research**

This research paper presents a comprehensive analysis of mid-term and final-term exams within the framework of Bloom's taxonomy. Through an extensive literature review, it has been determined that the specific combination of analyzing exams in relation to Bloom's taxonomy, especially focusing on mid-term and final-term exams, has not been previously undertaken at Khazar University or in other academic settings. Therefore, this study introduces a novel approach to the analysis of exams, contributing to the existing literature on both exam analysis and the application of Bloom's taxonomy.

Furthermore, the originality of this work is reinforced by the inclusion of a comprehensive literature review. This review explores previous research related to exam analysis and Bloom's taxonomy, further highlighting the unique contribution of this study to the academic field. The examination of how the exams align with the English for Specific Purposes (ESP) standards adds an additional layer of originality. By assessing whether the exam questions meet the requirements of ESP, this research offers insights into the appropriateness and effectiveness of the questions in addressing the specific language needs of students in their respective fields.

By incorporating Bloom's taxonomy and ESP standards into the analysis of exam questions, this research paper provides a deeper understanding of the nature of the questions and the level of critical thinking they demand from students. This exploration and evaluation of the exams' alignment with Bloom's taxonomy and ESP requirements not only contribute to the body of knowledge within exam analysis but also offer valuable insights for educators and curriculum developers in designing assessments that promote higher-order thinking skills.

Overall, this research paper's originality lies in its unique approach to analyzing mid-term and final-term exams through the lens of Bloom's taxonomy, as well as its consideration of ESP standards. Through this original research endeavor, valuable contributions are made to the existing literature, enhancing our understanding of exam analysis and its alignment with both cognitive frameworks and language-specific requirements.

# **3. CHAPTER: METHODOLOGY**

#### 2.1 Restatement of the objectives

The present section of the research project is dedicated to elucidating the research methodology, instruments, and research procedures employed in this investigation. The principal aim of this study entails a meticulous examination of the assessment procedures implemented for bachelor and master students hailing from diverse academic backgrounds within the English for Specific Purposes (ESP) framework at Khazar University. Through a comprehensive scrutiny of the examination practices, this objective seeks to provide a thorough understanding of the assessment methods employed and their congruence with the underlying principles and objectives of ESP.

Another pivotal objective of this research is to appraise the efficacy of the test questions utilized within the ESP program at Khazar University, with a specific emphasis on their capacity to adequately meet the specific requirements of English for Specific Purposes. This objective necessitates a scrupulous analysis and evaluation of the test questions to ascertain their compatibility with the identified language needs and the desired learning outcomes stipulated within the ESP curriculum.

Furthermore, this study endeavors to assess the extent to which the administered tests at Khazar University conform to internationally recognized and standardized criteria, particularly with respect to Bloom's Taxonomy. The objective is to scrutinize the alignment between the tests conducted by the university and the cognitive levels that delineated in Bloom's Taxonomy, thereby ensuring that the assessments transcend mere knowledge recall and effectively measure higher-order thinking skills.

By addressing these research objectives, the methodology section of the thesis will adopt a rigorous and systematic approach to scrutinize the examination practices within the ESP framework, evaluate the appropriateness of the test questions in fulfilling the requirements of ESP, and assess the alignment of the university's tests with internationally accepted standards and Bloom's Taxonomy.

#### 2.2 Procedure of the data analysis

This research project based on the test samples used for ESP classes' midterm and final exams of both bachelor and master degree students majoring in different fields at Khazar University. The samples are taken from different departments such as 'Petroleum and Engineering', 'School of Economics and Management', 'Computer Engineering', 'Civil Mechanical', 'English for Special Purposes', 'English Foundations', 'School of Humanities/Education and Social Sciences'. Totally twenty one samples used in exams within 2018-2023 have been closely inspected.

The methodology section of this thesis on the evaluation of Bloom's Taxonomy in 21 sample ESP exam papers at Khazar University is crucial in outlining the steps taken to conduct the research.

Within this research, the quantitative research method was used to analyze 605 exam questions from 21 sample ESP exam papers employed at Khazar University. The exam questions were classified into different cognitive levels based on Bloom's Taxonomy, and the frequency of each level was calculated. To ensure the reliability of the analysis, an inter-rater was also involved in the classification process.

For this study, a total of 21 sample exam papers from ESP courses at Khazar University were collected. Permission was obtained from the university to access the exam papers. The exam questions were analyzed and classified according to Bloom's Taxonomy by the researcher. To ensure the reliability of the analysis, an inter-rater was consulted to check the categorization of the exam questions. The inter-rater was also a master degree student majoring in linguistics and was not involved in the study. Any discrepancies in the categorization were discussed and resolved by the researcher and the inter-rater. The data collected from the exam questions were then used for quantitative analysis to determine if the questions were well-divided according to Bloom's Taxonomy.

During the data collection process, precautions were taken to ensure the confidentiality of the exam questions. The researcher only had access to the questions for the purpose of analysis and did not share them with anyone else. The inter-rater also followed the same protocol and only had access to the questions for the purpose of checking the categorization. The data collected was stored securely and only accessible by the researcher for the purpose of analysis. For the purpose of collecting this very data, the permission was requested from Khazar University, as soon as it was approved, different professors and instructors teaching ESP classes were contacted to see whether they are willing to share their tests administered at the university or not. Thanks to all, they did not reject our request and the samples used in different exams have been gathered.

#### 2.3 Models of analysis

This study adopts a rigorous and systematic model of analysis to investigate the examination practices and test questions within the English for Specific Purposes (ESP) framework at Khazar University. The model of analysis integrates two key components: Bloom's Taxonomy and ESP standards. By employing this model, the research aims to assess the cognitive complexity of the test questions and their alignment with the specific language requirements of ESP.

Bloom's Taxonomy, a widely recognized cognitive framework, serves as a basis for analyzing the level of cognitive demand and critical thinking skills targeted by the test questions. The questions have been categorized into different cognitive levels, ranging from lower-order skills such as remembering and understanding, to higher-order skills such as applying, analyzing, evaluating, and creating. This analysis provides insights into the depth of knowledge and cognitive skills required by the test questions.

In conjunction with the Bloom's Taxonomy analysis, the test questions have been evaluated against ESP standards. These standards encompass discipline-specific language use, vocabulary, communicative competence, and language functions relevant to the students' respective academic fields. The analysis focuses on assessing the appropriateness of the test questions in meeting these language-specific requirements of ESP.

To ensure objectivity and reliability, data for analysis have been collected from mid-term and final-term exams administered to bachelor and master students at Khazar University. The test questions have been coded and categorized based on the identified cognitive levels from Bloom's Taxonomy and the relevant ESP standards. This systematic coding process has facilitated consistent interpretation and comparison of the data.

The analyzed data have been interpreted to identify patterns, trends, and insights regarding the alignment of the examination practices and test questions with Bloom's Taxonomy and ESP standards. This interpretation involves examining the distribution of test questions across different cognitive levels, as well as assessing the quality and appropriateness of language use within the disciplinary contexts.

The findings from the analysis have implications for the effectiveness and relevance of the examination practices within the ESP framework at Khazar University. Based on these findings, recommendations can be made to enhance the alignment between the test questions, Bloom's Taxonomy, and ESP standards. These recommendations may include suggestions for refining the examination procedures, developing more cognitively demanding questions, or incorporating authentic and discipline-specific language tasks.

### 2.3.1 A model of Analysis in the light of Bloom's taxonomy

Within the framework of Bloom's Taxonomy, this study employs a sophisticated model of analysis to examine the cognitive demands of the test questions. The model encompasses a hierarchical progression from lower-order cognitive skills, such as remembering and understanding, to higher-order cognitive skills, such as applying, analyzing, evaluating, and creating.

At the lowest cognitive level of remembering, the analysis focuses on the identification and recall of fundamental concepts, facts, and information contained within the test questions. Moving to the understanding level, the emphasis shifts towards interpreting and comprehending the meaning and significance of the questions, as well as grasping the underlying principles and relationships embedded within the content.

Advancing to the applying level, the analysis explores the capacity to utilize acquired knowledge and understanding in practical and contextualized scenarios, effectively transferring theoretical concepts to solve problems and address real-life situations. Subsequently, the analyzing level delves into the deconstruction and examination of the test questions and associated content, discerning patterns, relationships, and connections within the provided information.

Progressing further, the evaluating level necessitates critical assessment and judgment of the test questions, enabling the appraisal of the strengths, weaknesses, and effectiveness of arguments, theories, or proposed solutions. Finally, at the highest cognitive level of creating, the analysis investigates the generation of novel and inventive ideas, solutions, or designs through the synthesis of information and concepts, resulting in the production of innovative outcomes.

By categorizing the test questions according to these distinct cognitive levels, the analysis aims to assess the depth of cognitive complexity and the degree of critical thinking required of the students. This comprehensive model of analysis provides a robust framework to evaluate the alignment of the test questions with the cognitive demands posited by Bloom's Taxonomy, facilitating a comprehensive understanding of the cognitive rigor and intellectual challenges embedded within the examination practices.

### 2.3.2 A model of analysis for English for specific purposes (ESP)

This study employs an intricate and comprehensive model of analysis to assess the suitability and effectiveness of English for Specific Purposes (ESP) within the examined context. The model integrates a myriad of components to thoroughly examine the alignment of ESP practices, language tasks, and assessments with the specific requirements and objectives of the target disciplines.

The analysis commences with a meticulous needs analysis, which serves to identify the language needs and goals of the target learners within their distinct academic fields. This process entails a rigorous evaluation of the requisite language skills, functions, and vocabulary essential for effective communication within their discipline-specific contexts.

Additionally, the model incorporates an authenticity analysis to scrutinize the authenticity and relevance of the language tasks and materials employed in ESP instruction. This examination aims to assess the extent to which the tasks and materials accurately reflect realworld situations and professional communication scenarios within the target disciplines.

Furthermore, the model includes a language functions analysis, which centers on evaluating the incorporation of specific language functions pertinent to the target disciplines. This analysis critically examines the integration of discipline-specific language functions, such as describing processes, presenting research findings, engaging in academic discussions, or composing formal reports.

Moreover, the model encompasses a vocabulary analysis that evaluates the inclusion of domain-specific vocabulary and terminology in ESP instruction and assessments. This assessment ensures the adequacy and appropriateness of the vocabulary utilized, thereby equipping learners with the necessary lexicon to proficiently communicate within their academic domains.

Another integral aspect of the model is the communicative competence analysis, which assesses learners' ability to employ language effectively and appropriately in authentic communicative situations. This analysis encompasses the evaluation of learners' proficiency in receptive and productive skills, discourse strategies, and sociolinguistic competence within their disciplinary contexts.

Lastly, the model incorporates an assessment analysis that evaluates the assessment methods and instruments employed in ESP. This analysis critically examines the alignment between the assessments and the identified language needs and objectives, ensuring that the assessments accurately measure learners' progress and proficiency within their academic domains.

By utilizing this comprehensive model of analysis, the study aims to conduct a critical evaluation of the extent to which ESP practices align with the specific language needs, goals, and objectives of learners within their academic disciplines. This meticulous analysis provides valuable insights into the effectiveness and appropriateness of ESP instruction and assessments, ultimately contributing to the enhancement of ESP programs and the facilitation of successful language learning outcomes within specialized contexts.

# 2.4 Inter-Rater Reliability analysis within the framework of Bloom's taxonomy

In this research, inter-rater reliability analysis was employed to ensure the consistency and objectivity of the question analysis process within the framework of Bloom's Taxonomy. A single rater was involved in evaluating and analyzing the test questions, and a high level of agreement was achieved, surpassing 85 percent.

To maintain the reliability of the analysis, the rater underwent rigorous training and was provided with clear guidelines for evaluating the questions based on the various cognitive levels defined by Bloom's Taxonomy. These guidelines facilitated a standardized approach and minimized potential subjectivity during the evaluation process.

During the analysis, the rater carefully examined each question, considering its cognitive complexity and aligning it with the appropriate level of Bloom's Taxonomy. The rater's judgments were then compared with an established set of reference criteria to determine the level of agreement. A threshold of 85 percent agreement was set as a benchmark to ensure a substantial level of consensus in the analysis.

The inter-rater reliability coefficient was calculated to quantitatively assess the agreement between the rater's judgments and the reference criteria. This coefficient serves as a measure of the proportion of agreement beyond what would be expected by chance. The obtained inter-rater reliability coefficient demonstrated a high level of agreement, indicating consistent and reliable evaluations of the questions.

The results of the inter-rater reliability analysis provide confidence in the reliability and objectivity of the question analysis process within the context of Bloom's Taxonomy. The high level of agreement achieved signifies that the rater's judgments align closely with the established reference criteria, validating the categorization of the questions according to their cognitive complexity.

By employing inter-rater reliability analysis, this research ensures the robustness and validity of the findings related to the alignment of the test questions with the different cognitive levels of Bloom's Taxonomy. The utilization of a single rater and the achievement of substantial agreement further strengthen the credibility and consistency of the analysis outcomes.

### **3. CHAPTER: RESULTS AND DISCUSSION**

# 3.1 Results

In this section, we are going to scrutinize our findings which have been gathered from several departments that enforced the assessment of ESP classes by means of midterm and final exams within different majors at Khazar University.

We aim to inspect the implementations of our findings on the data taken from the majors listed below;

- 1) Petroleum and Engineering
- 2) School of Economics and Management
- 3) Computer Engineering
- 4) School of Humanities, Education and Social Sciences
- 5) Civil mechanical

As stated above, the purpose of conducting this research project is to see whether the content and structure of the assessment tests used in ESP courses at midterm and final examinations during the last five years meet the requirements of ESP and divided suitably according to the levels of Bloom's Taxonomy or not. Twenty one examination samples with 605 questions have been closely examined and put into different categories.

The lowdown obtained from the very investigation is in the framework of written language tests, holistically administered within the final and midterm examinations by virtue of English department for different majors at Khazar University in Azerbaijan.

The tests are distinguished in terms of the sorts of tests (either subjective or objective), the quantity of test items and the title of the courses within time lapse. The EFL instructors designed the challenges through tests are selected regardless of their background experience and gender. We solely focused on questions for the purpose of conducting this research. The outcomes extracted out of the investigation revolve around six hundred five test items.

The trials compiled from tests gathered and categorized to be arranged in accordance with six domains of Bloom's Taxonomy, as listed below:

- 1) Test items intended to measure the level of remembering
- 2) Test items intended to measure the level of understanding
- 3) Test items intended to measure the level of applying
- 4) Test items intended to measure the level of analyzing

- 5) Test items intended to measure the level of evaluating
- 6) Test items for intended to measure the level of creating

Each division involves representative verb forms and related to distinctive cognitive domain. The table displayed below delineates the categorization of data aiming to gather the classification taking into account Bloom's Taxonomy.

	Cognitive Level	Test items	Data Identity
	Test item for	What kinds of oil do you know according to the given text?	F.1
	remembering		
-			
	Test item for	The article mentions that Mr.Gokyigit learned all of the computer addresses in the	
	Understanding	company's thick logbook. What can you infer from this?	F.2
	Test item for		
	applying	Open the brackets using the correct forms of Present perfect continuous.	F.3
	Test item for	Compare the advantages and disadvantages of getting education abroad to getting in	
	analyzing	homeland.	F.4
	Test item for	Discuss both views and give your own opinion in the end.	F.5
	evaluating		

# Table 1. Example of data categorization

Test item for Write a MEMO as the head of the department by following the guidelines listed below:

Creating

F.6

# 3.1.1 The analysis of questions within the framework of Bloom's Taxonomy

The outcomes of this research uncovered some facts regarding the compatibility of test trials made use within language tests depending on whether they fit to Bloom's Taxonomy or not.

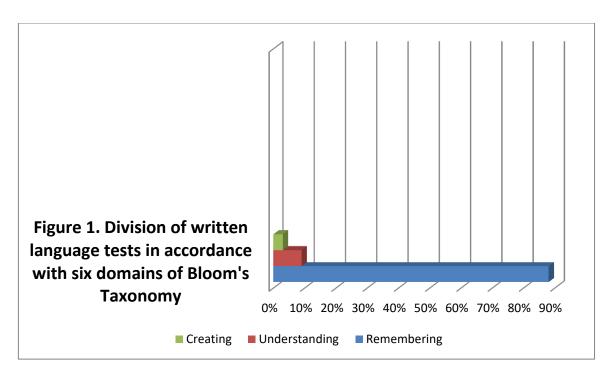


Figure 1 displays the overall analysis of outcomes which indicates that the tests of remembering are of 88% is the most encountered category followed by the category of understanding which is 9%. The implementation behind this inquiry shows that two phases of low-level mental states are presented within test trials except for applying. Morever, regarding high-level cognitive domain, only the creating phase revealed to be existing which is deemed to be the highest level of cognition in 3%. Additionally, tests for analysing and tests for evaluating are not employed as seperate test items but rather involved in tests for creating that both are indicated in 2%. Taking into account all these results, we are confirmed to say that English teachers gave the uppermost attention to employing tests of lower-level cognition and neglecting the tests promoting high-order cognitive levels. The Bloom's Taxonomy wasn't properly applied.

Remembering	154	95%
Understanding	4	2%
Applying	0	0%
Analyzing	0	0%
Evaluating	0	0%
Creating	4	2%

Table 2, The division of questions according to the Bloom's Taxonomy in percentage employed within 2018 year.

As shown in Table 2, one hundred sixty two questions were analyzed and classified according to the phases of Bloom's Taxonomy. Results revealed that the vast majority of the questions are alligned with low-level cognitive domain, expressed within phases 'remembering' of 95% and understanding of 2%. None of the questions regarding applying, analyzing or evaluating phases were detected seperately. Only creating level as high-order cognitive domain was observed within 2% while the other two levels analysing and evaluating were constituents of questions on the creating level. As clearly seen the results didn't meet the requirements of Bloom's taxonomy since more than 90% of the questions involve low-level cognitive domain whereas high-level phases are indeed more helpful for developing higher cognitive skills.

Table 3, The division of questions according to the Bloom's Taxonomy in percentage employed within 2021 year.

Remembering	155	83%
Understanding	25	3%
Applying	0	0%
Analyzing	0	0%
Evaluating	0	0%
Creating	7	4%

When we look at the findings obtained from tests conducted in 2021, we are confronted with the similar results. One hundred fifty five questions were carefully inspected. The most often encountered questions were intended to measure comprehension level with 83% within remembering and 3% through understanding phase. No seperate questions requiring applying, analyzing and evaluating were encountered. Only 4% of the questions were devoted to creating phase which is regarded as high-level cognition. Applying, Analyzing and evaluating levels are partially found within questions of creating stage in 2%.

Table 4, The division of questions according to the Bloom's Taxonomy in percentage employed within 2022 year.

Remembering	156	84%
Understanding	24	13%
Applying	0	0%
Analyzing	0	0%
Evaluating	0	0%
Creating	6	3%

Unequivocally, one hundred fifty six questions were analyzed and results indicate almost the same outcomes with previous years. The similar process is also encountered here since the majority of the questions aimed to measure low-level dimensions whilst high-level ones are obviously neglected.

Table 5, The division of questions according to the Bloom's Taxonomy in percentage employed within 2023 year.

Remembering	154	95%
Understanding	4	2%
Applying	0	0%
Analyzing	0	0%
Evaluating	0	0%
Creating	4	2%

Table shows the findings and their outcomes within 2023. Over the course of five years, unfortunately any kind of substantional change could not be found. The transmission from

lower-order levels to the higher-order ones could not be observed and applying, analyzing, evaluating were the least resorted.

#### Test items for remembering

To the best of researcher's knowledge, test items created for measuring students'surface knowledge typically refer to the process of recalling or retrieving information from long-term memory. As delineated above, 88% of the test items presented within mid term and final examinations administered at different times built on remembering phase regarded to be the low-level cognitive ability. The test-takers are intrinsically expected to demonstrate how much they are capable of either recalling or recognizing the data reserved in long-term memory by means of triggers stimulating to retrieve it out. The most generated questions are usually test items asking test-takers fill in the gaps, either give terms for definitions or definitions for given terms, recognize or recall information, identify if the given statement is true, false or not even mentioned within a passage or a text, list concepts or types of a phenomena.

Morever, the test trials employed for remembering are requested in the light of multiply questions, matching halves or exercises, also embedded within different types of questions involving problems to be solved, often expected to spice up with world knowledge or experience.

In total 530 items were identified as tests for remembering which counts to be 88% of 605 questions.

#### Tests for understanding

Tests designed for examining students' understanding comprehension mostly found to be of measuring low-level dimension, requiring test takers to either remember the information or make a modification to it. This lower thinking dimension found in tasks for either categorisation or classification, summarising, making interpretations by test takers own words which is considered to be more than remembering. For instance, when the question asks the test taker to give information on 'motivation', 'types of motivation' by his or her own words, here they are expected to rewrite the information they are imparted during the classes by interpreting on their own. The total number of questions aimed to measure students' comprehension is 58 out of 605 questions that is 9%.

#### **Tests for applying**

Interestingly, the test for applying has not been detected as a seperate question and seems to be uneuqivocally avoided by ESP instructors. The demand of these type of questions is to stimulate students'particular skills of performance. As the name indicates, the core essence of this level is to apply a learned notion to an unseen task. For example; 'open the brackets with the appropriate tense forms'. Since the students are supposed to learn tense forms and its related rules in a classroom, they are likely to apply what they learnt in a distinct context. From a phylosophical point of view, when we closely examine the structure of the questions we encounter some aspects including the application of certain knowledge yet not definitely spot independently.

#### **Tests for analysing**

These type of test are usually administered for stimulating higher level discernment to make connections between parts of a single notion or simply breaking it into its constituent parts to see how and why they are bonded as the way they are. These type of questions could be employed if the specifications are imparted to the test takers or they already know it beforehand. For instance, if they know the types of motivation, they can simply analyze sample therapy sessions according to their existing knowledge. No items were found within 605 questions regarding analysis phase seperately. However some questions, involve some kind of analysis to some extend, they are 11 in total that counts for only 2% in general.

#### **Tests for evaluating**

The conducted research followed by the analysis of data showed that the higher order thinking level calledevaluating phase was not observed in seperate question items but in relation with others. The evaluation as aprocess was detected within 14 questions in total. This phenomena refers to the judgement of notions based on standards and criteria determined with background knowledge. The evaluating level emcompasses assertion and criticising followed by insightful interpretation. In this case, test takers are expected to evaluate the given ideas or guesstimates simply by guidance or following steps behind instructions.

The evaluating questions were mostly encountered within writing questions. 2% of the questions devoted to this very high-level cognitive category in total.

#### **Tests for creating**

Being one of the higher order thinking level, this phenomena includes some steps such as producing something unique by outlining a plan. 17 test items were labelled as creating level in total requiring to produce something in terms of what they have been taught during classes.

Since it is deemed as the highest thinking skill, it demands students to combine their background knowledge with different elements by igniting their perception. 3% of the questions were dedicated to this level in total.

# **3.2 Discussion**

# **3.2.1** Examining the test items in the light of Bloom's Taxonomy and ESP standards

When analyzing the structure of the examination papers utilized at Khazar University, it becomes evident that they are predominantly organized into four sections, namely Listening, vocabulary, reading comprehension, and writing. In accordance with the assessment principles implemented in language testing systems within an educational context, exam papers are expected to cover the material taught during a specific period. However, a welldesigned exam paper, aimed at evaluating language proficiency, should encompass the assessment of the class material across the four essential language skills.

Considering that the primary objective of conducting ESP classes is to meet the specific needs of learners, the assessment component should align seamlessly with this process. In our study, we have observed that our findings, derived from the analysis of twenty-one exam papers administered between 2018 and 2023, demonstrate a consistent adherence to the aforementioned criteria.

# Examples extracted from test papers are displayedon the next page;

Khazar University

**English Language and Literature Department** 

**ESP** Petroleum Engineering

Midterm Exam/Fall 2018

Variant A/ Total 30 points

**SECTION I. Reading(Total 10 points/1 question=1 points)** 

1. Read the passage and choose the correct answers.

## Oil

There are three main groups of oils: animal, vegetable and mineral. To the ordinary man, one kind of oil may be as important as another. But when the politician or the engineer refers to oil, he almost always means mineral oil, the oil that drives tanks, airplanes, warships, motor-cars, and diesel locomotives; the oil that is used to lubricate all kinds of machinery. This is the oil that has changed the life of the ordinary man.

(originally adopted from Khazar University's examination center)

As delineated within an example above, we observe that a reading passage choice employed within the midterm exam for the major 'Petroleum Engineering' is perfectly aligned within the very profession including the necessary vocabulary regarding the context of petroleum engineering. Regarding this reading passage, 10 questions were employed, 5 of them were open-ended and the other half were 'true' or false' questions measuring to what degree students remember or understand the imparted information.

# Examples are portrayed on the next page;

Chart 2. Reading test items extracted from	n the exam paper of 2018
--	--------------------------

Read the text.	
A. Answer the following questions.(each- 2 points)	
1. How can you define the substance that is called oil?	
B. Read the text again and write True or False to each statement.	
1. Scientists are quite sure about the formation of oil.	ΤF

The significance of vocabulary as a key language skill cannot be overstated, as it serves as a fundamental element in enhancing all other language skills. In the context of this particular exam paper, it is noteworthy that half of the test items, specifically 20 out of 40, were dedicated to assessing vocabulary comprehension.

These items were designed in a manner that required test takers to select appropriate words from a provided list and correctly fill in the given gaps, as well as match synonyms. Notably, these vocabulary-focused questions were well-aligned with the ESP context, placing emphasis on professional terminology such as "pump" and "crude oil."

Chart 3. Vocabulary tests extracted from the exam paper of 2018

Downstream	fuel	refined	pipeline	crude oil	helmet	crew
welding explo	oration	ритр				
. It's very ri ny				e oil rig	without	wearin
. 1) Choose th	e svnon	vms of tl	he fallowi	na words.	(Total 10	noints

(originally adopted from Khazar University's examination center)

In summary, the examination items utilized in this paper can be regarded as valid according to ESP criteria, as they demonstrate a sound design that incorporates relevant vocabulary and terminology associated with the field of Petroleum Engineering. However, the categorization of questions based on Bloom's Taxonomy reveals a lack of systematic alignment, as all 40 questions in the paper primarily assess lower-order cognitive skills. It is recommended to incorporate a greater number of questions that aim to stimulate higher-order thinking abilities for a more comprehensive assessment.

Chart 4. Writing task extracted from the exam paper of	2018
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Khazar University
English Language and Literature Department
ESP for Economics
Spring term/2018
Variant A
Total: 30 points
V. Write at least a – two -paragraph - essay based on the topic below. You can use the
backside of the sheet: (min.180 words – 5 points)
In some countries, a few people earn extremely high salaries. Some people think that
this is a good for a country, while others believe that the government should control
salaries and limit the amount people can earn.
Discuss both views and give your opinion.

(originally adopted from Khazar University's examination center)

This particular test item entails the creation of an original work, which is generally categorized as a higher-order thinking task, primarily associated with the creation phase of Bloom's Taxonomy. However, it should be noted that elements of analyzing and evaluating are also involved in this task. To provide a comprehensive discussion, it is necessary to analyze both perspectives and evaluate the findings before offering a personal opinion.

It is evident that this test item is well-designed, as it encompasses all the high-level thinking patterns outlined in Bloom's Taxonomy. Nevertheless, it is worth mentioning that such types of questions are not extensively represented within the exam, and incorporating more of them may require additional time from students, whose time is limited. Furthermore, an excessive exposure to these complex questions could potentially lead to increased stress and anxiety among students.

Therefore, while recognizing the value of including more of these higher-order thinking questions, it is important to strike a balance considering the potential impact on students' wellbeing and the constraints of their available time.

#### Chart 5. Writing task extracted from the exam paper of 2021

Khazar University
School of Science and Engineering
English Language and Literature Department
ESP Computer Engineering
Midterm exam / Fall 2021
Total 30 points
Section C: Writing (10 points; 2.5 – content, 2.5 - structure, 2– grammar, 3-
vocabulary) Write a paragraph to one of the following topics. Write at least 150
words. 1. Benefits of using Laptops in comparison with using PCs.

(originally adopted from Khazar University's examination center)

the test item focuses on the benefits of using laptops compared to using PCs. This evaluation task involves analyzing the advantages of laptops and PCs, as well as creating a comprehensive response that highlights the specific benefits of laptops. The assessment of this question demonstrates adherence to key evaluation principles, encompassing content relevance, sentence structure, vocabulary usage, and grammatical accuracy. Considering the context of the question within a computer engineering examination, the content aligns effectively with the standards of English for Specific Purposes (ESP) and successfully addresses the requirements of Bloom's Taxonomy.

# **3.** The article mentions that Mr.Gokyigit learned all of the computer addresses in the company's thick logbook. What can you infer from this? (1.5 points)

(originally adopted from Khazar University's examination center)

This question serves as a strong illustration of a reading comprehension task that assesses the understanding phase of Bloom's taxonomy. It involves comprehending a given reading passage that encompasses vocabulary specifically relevant to the field of 'computer engineering,' thereby meeting the requirements of English for Specific Purposes (ESP). The inclusion of related vocabulary within the reading passage enhances the overall alignment of the question with the ESP framework.

Upon reviewing a sample paper administered in 2022, it can be observed that minor adjustments were made toits format, which remained composed of four distinct sections - listening, vocabulary, reading, and writing. Additionally, the number of questions was increased.

## Chart 7. Listening test extracted from the exam paper of 2022

**Khazar University** 

School of Science and Engineering

English Language and Literature Department/English for Special Purposes FinalExam/Fall2022/Total 35 points

Section A: Listening (5 points; each – 1) A. Listen to the news report and choose True or False for questions 1-5. 1. More than 10% of British engineers are females. T/F

(originally adopted from Khazar University's examination center)

The listening section of the exam consists of five true or false questions that primarily assess the foundational remembering phase of Bloom's Taxonomy. The content of these questions is well-aligned with the subject matter of computer engineering, incorporating relevant vocabulary specific to the field. Chart 8. Vocabulary tests extracted from the exam paper of 2022

Choose the correct definitions from section A for the words in Section B. (5 points; each – 1) A B 1. To formally forbid (something) by law, rule, or other authority A. A responsibility

2. Complete the sentences with suitable words and phrases from the box. (5 points; each - 1) a) clay a) solar c) warn e) regulations g) bend 1) Every company employee should know and follow all the safety \_\_\_\_\_\_ at work.

(originally adopted from Khazar University's examination center)

The vocabulary section of the exam consists of ten questions, with five of them focusing on matching definitions to words and the other five requiring students to select appropriate words for given sentences from a provided set. The vocabulary employed in each question aligns with the specific language context of ESP, aiming to equip students with the necessary language skills for their future professional settings. While these questions primarily assess the lower-level remembering phase of Bloom's Taxonomy, it is worth noting that identifying the correct word for each gap may require more than mere recall of information, indicating a potential integration of higher-level cognitive processes.

#### Chart 9. Reading task extracted from from the exam paper of 2022

Section C: Reading (5 points- each 0.5) Read the text and match the headings 1- 10 below to the paragraphs A- J. Rotor and Rotor Blades

(originally adopted from Khazar University's examination center)

The reading section of the exam presents a passage that is divided into sections, with 10 headings provided for students to match with the appropriate sections. The selection of a topic related to the field of engineering appropriate in line with the principles of ESP, as it allows students to engage with subject-specific content.

While these test items primarily assess the lower-level remembering phase of Bloom's Taxonomy, as students recall and match information, they provide an opportunity for students to demonstrate their understanding and comprehension of the text within the context of their field of study.

## Chart 10. Writing task extracted from the exam paper of 2022

Section D: Writing (10 points: 2- content; 2 - structure, 3 – grammar, 3 – vocabulary, ) Write your opinion about this topic- *"Technology has changed people's life. What are the positive and negative effects of technology on people's daily life?"*.

(originally adopted from Khazar University's examination center)

Based on the researcher's observations, it can be noted that higher-order thinking levels of Bloom's Taxonomy are predominantly evident in the writing tasks. The provided example clearly demonstrates this characteristic, as it requires students to analyze both the positive and negative aspects of technology's impact on people's lives, critically evaluate the situation, and generate an original piece of writing. This task encompasses the creation phase of Bloom's Taxonomy, as students are expected to develop their own unique perspective and ideas.

The question is well-designed, stimulating the application of higher-level cognitive skills and aligning with the specific needs of learners in the engineering field by incorporating a technology-related context.

# Chart 11. Listening task extracted from the exam paper of 2023

Khazar University
School of Science and Engineering
English Language and Literature Department
English for Special Purposes (computer engineering)
Final exam / Fall-Winter 2023
Total 35 points
Section A: Listening (10 points)
a) Listen to a man who introduces himself to a woman by phone that he met on a
social networking site. Choose the correct option. (5 points, each-1). 1. What is the
man's name?
A. The man goes by Russel.
B. His name is Robert.
C. The man's name is Ronald
D. His name is Rowan
b) Listen and write TRUE or FALSE. (5 points, each-1)
1. His parents call him Ron.

<sup>(</sup>originally adopted from Khazar University's examination center)

When examining an example of an exam paper from the current year, it is noteworthy that there has been an increase in the number of questions compared to previous years, with a total of 45 questions. The paper maintains the division into four sections, indicating a systematic approach in terms of difficulty and structure. This enhanced organization suggests a more refined design, potentially incorporating the lessons learned from previous years' exams. By implementing a systematic approach, the exam paper aims to provide a balanced assessment of the students' knowledge and skills across the different sections.

The listening section of the exam paper employs multiple-choice test items, where students are required to choose the correct answer among the provided options. These types of tasks primarily focus on assessing the students' ability to recall information, placing them within the remembering level of Bloom's Taxonomy. The selected context for the listening tasks is relevant and aligned with the field of study, ensuring that students are tested on their comprehension of subject-specific content.

#### Chart 12. Vocabulary tests extracted from the exam paper of 2023

Section B. Vocabulary (10 Points) a) Match the words with their definitions (5 points, each-0,5) Vector graphic, raster graphic, web design, clone/stamp tool, straighten tool, thorough, numerator, denominator, obsolescence, theory of computation, computability theory, computational complexity theory (two words are extra)

1. It is a function in many graphics programs, including Adobe Photoshop, Illustrator, Inkscape, GIMP and others that allows users to replace one part of an image with another. - .....

#### b) Fill the gaps (5 points, each-0,5)

pant, junkyard, shudder, shiver, to invest in, criticism, to be content with, dip, erratic, hit a peak, malicious, cue (two words are extra)

1) We've decided it's time to .....a new computer.

(originally adopted from Khazar University's examination center)

The vocabulary section of the exam paper demonstrates a well-defined selection of vocabulary that is specific to the field of study, aligning with the principles of ESP. The test items in this section primarily focus on the remembering phase of Bloom's Taxonomy, as students are expected to recall and identify the appropriate words to fill in the gaps or match with definitions. However, it is worth noting that the process of selecting the correct words for

the given context involves a deeper level of understanding beyond mere recall, as students need to comprehend the meaning and context of the words to make appropriate choices.

# Chart 13. Reading tests extracted from the exam paper of 2023

Section C. Reading (10 Points) Read the text titled "Space Travel and Science Fiction" and mark true/false, answer the questions (1 point) Space travel and science fiction have long been connected. Writers of science fiction, as well as creators of science fiction TV shows, and movies, often study the latest scientific concepts and use or adapt them to help portray what future space travel, spaceships, and space stations might look like....

a) Are these statements TRUE or FALSE? (5 points, each-1) TRUE FALSE 1.

According to the passage, given the time in which he was writing, Verne's predictions were satisfactory.

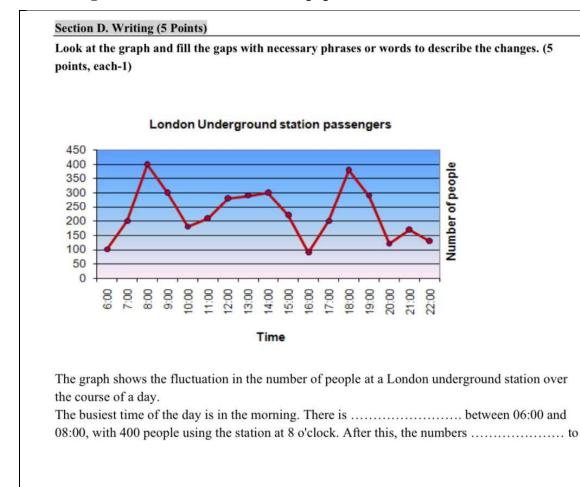
b) Read the text and answer the questions (5 points, each-1)

1) How did science fiction help the engineers to build new space technological advances?

(originally adopted from Khazar University's examination center)

The reading section of the exam paper includes both true or false questions and open-ended questions, which primarily target the remembering and understanding levels of Bloom's Taxonomy. The true or false questions assess students' ability to recall specific information from the passage, while the open-ended questions require a deeper understanding of the content. Although the questions in this section focus on lower-order cognitive skills.

The choice of reading passages relevant to computer engineering ensures the alignment with the ESP context, making them suitable for assessing students' comprehension in the specific field of study.



#### Chart 14. Writing task extracted from the exam paper of 2023

(originally adopted from Khazar University's examination center)

The writing task in the exam paper shows a change in structure, incorporating the use of a graph. This task requires students to analyze and interpret the information presented in the graph, involving both the remembering and analysis phases of Bloom's Taxonomy. By examining and understanding the data represented in the graph, students are able to formulate a written response that demonstrates their ability to analyze and draw conclusions from the information. This task encourages higher-order thinking skills and provides an opportunity for students to apply their knowledge and skills in the context of computer engineering.

Based on the investigation conducted at Khazar University in Azerbaijan, it was found that written language tests administered by the English department for different majors were distinguished in terms of the types of tests, the number of test items, and the title of the courses within the time frame. The investigation focused solelyon questions, and six hundred and five test items were analyzed, which were categorized into six domains of Bloom's Taxonomy. The outcomes indicated that English teachers paid the most attention to using tests of lower-level cognition (remembering), neglecting tests that promoted higher-order cognitive levels (analyzing and evaluating). Only the creating phase revealed to be existing, which is considered the highest level of cognition, and tests for analyzing and evaluating were involved in tests for creating.

The investigation also analyzed the compatibility of test trials with Bloom's Taxonomy. The results of the investigation indicated that the tests did not meet the requirements of Bloom's Taxonomy, as more than 90% of the questions involved low-level cognitive domains, whereas high-level phases were indeed more helpful for developing higher cognitive skills.

Furthermore, the investigation analyzed the questions according to the Bloom's Taxonomy employed within the years 2018, 2021, 2022 and 2023. The results of the analysis revealed that the majority of the questions were aligned with the low-level cognitive domain of remembering, with 95% in 2018 and 83% in 2021. Only 2% of the questions were devoted to creating, which is regarded as high-level cognition. Applying, analyzing, and evaluating levels were partially found within questions of the creating stage, indicating that the tests did not meet the requirements of Bloom's Taxonomy.

Bloom's Taxonomy is a framework for categorizing educational goals and objectives that was first introduced in 1956 by a group of educators led by Benjamin Bloom (Bloom et al., 1956). The taxonomy has been revised and updated over time, with the most recent version being from 2001 (Anderson & Krathwohl, 2001).

The taxonomy consists of six levels of cognitive complexity, each building upon the one before it in a hierarchical manner. The levels, listed from lowest to highest, are Remembering, Understanding, Applying, Analyzing, Evaluating, and Creating.

In this MA thesis, I employed Bloom's Taxonomy as a research approach to analyze the questions used in midterm and final term exams at Khazar University. As mentioned earlier, Bloom's Taxonomy is a framework that categorizes educational goals and objectives into six levels of cognitive complexity. These levels are hierarchical in nature and can be used to analyze the cognitive demands of exam questions.

To analyze the exam questions, I first identified the verbs used in each question, as they often indicate the level of cognitive complexity being tested. For example, verbs like "recall," "list," and "define" typically indicate questions that test the Remembering level, while verbs

like "analyze," "compare," and "evaluate" generally indicate questions that test the Analyzing or Evaluating level.

Once I identified the verbs, I then categorized each question according to its corresponding level in Bloom's Taxonomy. This allowed me to understand the distribution of cognitive complexity across the exams, and to identify any areas where the exams may have been lacking in terms of testing higher-level thinking skills.

Overall, employing Bloom's Taxonomy as a research approach was a valuable tool for analyzing the exam questions and understanding the cognitive demands of the exams. It allowed me to provide insights into the extent to which the exams aligned with the learning objectives of the courses and to identify potential areas for improvement in terms of assessing higher-level thinking skills.

# **4. CHAPTER: CONCLUSION**

### 4.1 Summary

To conclude, These research questions have guided the investigation and analysis conducted in this study providing insights into the examination practices, alignment with ESP requirements, and adherence to international standards.

- a) How do examinations within the English for Specific Purposes (ESP) framework at Khazar University assess bachelor and master students specializing in different fields?
- b) To what extent do test questions used in ESP examinations at Khazar University meet the specific requirements of English for Specific Purposes?
- c) Do the tests administered by Khazar University align with internationally recognized standards, particularly in relation to Bloom's Taxonomy?

Based on the findings of my research paper, it is evident that the questions utilized in the written language tests administered by the English department exemplify a commendable level of excellence, showcasing the proficiency of the test designers. The investigation focused on various facets, including the types of tests, the quantity of test items, and their alignment with Bloom's Taxonomy.

One noteworthy aspect is the meticulous attention devoted to question design. The comprehensive analysis of 605 test items revealed a diverse array of question types, illustrating the depth and breadth of the assessment approach implemented. This rich variety contributes to a comprehensive evaluation of students' language skills and their capacity to apply knowledge across various contexts.

Moreover, the examination of the questions through the lens of Bloom's Taxonomy provides valuable insights into the cognitive complexity targeted within the tests. While the investigation highlighted a relatively higher emphasis on lower-level cognitive domains, such as remembering, it also revealed the inclusion of questions that foster higher-order thinking skills, particularly in the creating phase. This inclusion signifies the test designers' commitment to nurturing critical thinking, creativity, and problem-solving abilities among students.

However, it is essential to note that the analysis also indicates a need for an increased focus on higher-order questions. While the presence of questions targeting higher cognitive levels is acknowledged, their representation remains comparatively limited. To enhance the assessment process and foster more extensive cognitive engagement, it is recommended that the test designers multiply the number of higher-order questions within the written language tests. This would offer students increased opportunities to analyze, evaluate, and synthesize information, thereby strengthening their ability to engage in complex cognitive processes.

The alignment analysis of the questions across multiple years further underscores the dedication of the test designers to maintaining a consistent and rigorous assessment framework. The majority of the questions demonstrate alignment with the appropriate cognitive domain, exemplifying the conscientious approach taken in designing assessments that correspond to the intended learning outcomes.

Overall, the findings of my research paper substantiate the excellence and proficiency of the test designers at Khazar University. The diverse range of question types, the inclusion of higher-order thinking skills, and the alignment with Bloom's Taxonomy collectively contribute to the robustness and effectiveness of the assessment process. However, it is recommended that a greater emphasis be placed on incorporating a higher number of questions that stimulate higher-order cognitive processes, thus further enriching the evaluation of students' language proficiency and their capacity for critical and analytical thinking.

The efforts made by the English department and test designers at Khazar University in ensuring the quality and validity of the written language tests deserve recognition. The findings of this research paper not only commend their proficiency but also serve as a foundation for continuous improvement, fostering a culture of excellence in assessment practices. By increasing the proportion of higher-order questions, the university can enhance the assessment process, facilitating deeper learning and the development of advanced cognitive skills among students.

But it must also be emphasised that teachers created the tests are well aware of the students educational background and psychological conditions, so paying less attention to involving more higher-order thinking questions could be justified.

## 4.2 Implications of the study

There are several implications of this study. Firstly, the findings suggest that there is a need for more training and awareness among ESP instructors regarding the effective use of Bloom's taxonomy in the design of assessment items. This can help them to develop assessments that measure higher-order thinking skills such as analysis, synthesis, and evaluation, which are critical for students' success in academic and professional settings.

Secondly, the study highlights the importance of aligning course objectives, instructional methods, and assessments. When assessments are designed based on course objectives and instructional methods, students are better equipped to demonstrate their learning and achievement of the intended outcomes.

Thirdly, the study underscores the need for continuous evaluation and improvement of assessment practices in ESP courses. By using Bloom's taxonomy as a framework, instructors can evaluate the effectiveness of their assessments and identify areas for improvement. This can lead to the refinement of assessments over time, ultimately enhancing students' learning experiences.

Finally, the study has implications for the wider field of ESP education. It emphasizes the importance of incorporating research-based practices into the design and implementation of ESP courses. By doing so, ESP educators can ensure that their courses are effective in meeting the needs and expectations of students, and that they prepare them for success in their future academic and professional endeavors.

## 4.3 Applications of the study

The applications of this study are numerous and diverse. First and foremost, this study can be used as a basis for improving the quality of ESP exams by aligning the questions with the appropriate cognitive levels of Bloom's taxonomy. This, in turn, can lead to better learning outcomes for the students and more accurate evaluation of their performance. Furthermore, this study can serve as a model for other educational institutions that use ESP courses as a means of improving students' English proficiency in specific fields. By applying Bloom's taxonomy in their exam questions, these institutions can ensure that their students are being evaluated at the appropriate cognitive levels, which can enhance the rigor and validity of their assessments.

Finally, the findings of this study can contribute to the broader field of language assessment and curriculum development by providing insights into how Bloom's taxonomy can be applied in language education.

## **4.4 Suggestions for further discussions**

Based on the findings of this study, several suggestions can be made for further discussion and research.

Firstly, future studies could investigate the relationship between Bloom's taxonomy and other factors that might influence the quality of exam questions, such as the difficulty level of the questions, the course content, and the instructors' teaching methods.

Secondly, it would be beneficial to examine the effectiveness of using Bloom's taxonomy as a guideline for creating exam questions in other educational contexts and disciplines.

Thirdly, more research is needed to explore the extent to which instructors are familiar with Bloom's taxonomy and how they can integrate it into their teaching practices.

Finally, additional researches could investigate the potential impact of using Bloom's taxonomy.

## 4.4.1 Some additional suggestions for further discussion

Use of alternative assessment methods: Future research can explore alternative assessment methods that may better align with Bloom's taxonomy, such as performance-based assessments, project-based assessments, or authentic assessments. These types of assessments can allow students to demonstrate their understanding of higher-order thinking skills in a more meaningful and authentic way.

**Teacher training and professional development**: The results of this study suggest that there may be a need for teacher training and professional development to help instructors better understand Bloom's taxonomy and how to align their assessments with it. Future research can explore the effectiveness of various training programs and professional development workshops in improving the quality of assessments.

**Cross-disciplinary comparison**: This study focused on ESP courses at Khazar University, but future research can explore if similar patterns exist across different disciplines and institutions. Comparing the use of Bloom's taxonomy in assessments across different fields of study can help identify common challenges and opportunities for improvement.

**Longitudinal studies**: This study focused on the alignment of assessments with Bloom's taxonomy at a single point in time. Future research can explore how the use of Bloom's taxonomy in assessments changes over time and how it relates to changes in student learning outcomes. Longitudinal studies can provide valuable insights into the effectiveness of different assessment practices over time.

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