

People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University of El-Tarf
Faculty of Letters and Languages
Department of English



**The Relevance of ESP Content in the Textbook Getting Through
(Secondary Education Year Two – Scientific Stream): An ESP-Based
Content Analysis**

**Dissertation submitted to the department of English in candidacy
for the M.A degree in 'Didactics of English**

Submitted by :

Dorbani Asma & Benhannachi Amir

Supervised by :

Ms. Berzane Assia

Board of Examiners

President: Dr. Belabbes Zouleykha MCB University of Chadli Bendjedid El-Tarf

Examiner: Mr. Medjabra Amine MAA University of Chadli Bendjedid El-Tarf

Supervisor: Ms. Berzane Assia MAA University of Chadli Bendjedid El-Tarf

2025\2026

Declaration of Originality

We hereby declare that the substance of this dissertation is entirely our own work and that it has not been submitted previously, in whole or in part, for a degree at this or any other university or institution.

We also declare that all sources, whether published or unpublished, have been properly acknowledged and fully cited in accordance with standard academic referencing practices.

Signatures :

DORBANI Asma : _____

BENHANNACHI Amir : _____

Date: _____

Dedication 1

Dedicated with deepest love and gratitude to the ones who raised me. Thank you for standing by my side every step of the way. You gifted me with a profound sense of belonging, and armed me with the courage and trust I needed to navigate this journey. This work is merely a small testament to the immense love and dedication you have poured into my life. A special dedication to my best friend, Zaidi Lyna Meriem. Thank you for stepping up to help me in ways I never could have asked for, and for being my constant voice of reason. To the rest of my dearest friends, who provided a sense of laughter and peace when the journey grew heavy. Thank you for being exactly the distraction I needed and for constantly easing the tension along the way. And to everyone who offered a quiet word of encouragement, a helping hand, or even the briefest moment of support. None of it went unnoticed, and I am profoundly grateful for it all.

Dorbani Asma

Dedication 2

This work is dedicated to my parents, whose unconditional love, sacrifices, and unwavering support have made this achievement possible. I am profoundly grateful for their constant encouragement and belief in me throughout my academic journey.

*I would also like to express my sincere gratitude to my supervisor, **Ms. Berzane Assia**, for her invaluable guidance, patience, and continuous support throughout the research process. Her advice and expertise have been essential to the completion of this work.*

Finally, I extend my heartfelt thanks to my family, friends, and everyone who supported me along the way during this journey.

Amir Benhannachi

Acknowledgement

We would like to express our deepest and most sincere gratitude to our supervisor, Ms. Berzane, for her invaluable guidance, continuous support, and insightful feedback throughout this research. This dissertation would not have been possible without her academic expertise and encouragement.

We wish to express our sincere appreciation to the distinguished members of the examining jury: the President of the Jury, Dr. Belabess, and the Examiner, Mr. Medjabra. We are deeply honored that you have taken the time to read, evaluate, and provide valuable feedback on this dissertation.

A special word of thanks goes to the 31 secondary school English teachers in the wilaya of El Tarf who generously volunteered their time to participate in the questionnaire. Their practical insights and professional experiences formed the foundation of this study.

Abstract

English has increasingly become an essential instrument for specialized communication, leading to the growing prominence of English for Specific Purposes (ESP) in academic and professional domains. In the Algerian educational context, secondary school students in scientific streams require discipline-specific language skills to prepare for higher education, where scientific subjects are predominantly taught in foreign languages. However, English instruction frequently relies on General English approaches rather than targeted ESP methodologies. This study aims to evaluate the relevance and effectiveness of the ESP content in the official textbook *Getting Through*, prescribed for second-year secondary school students in the scientific stream in Algeria. To achieve this aim, a descriptive-analytical content analysis of the textbook was conducted, examining its topics, specialized vocabulary, reading texts, and pedagogical tasks against established ESP criteria. This primary analysis was supplemented by data gathered through a questionnaire administered to 31 secondary school English teachers in El Tarf province. Findings indicate that despite a broad acknowledgement of the need for science-specific instruction, the textbook relies heavily on General English, lacking relevant scientific tasks and vocabulary. Consequently, it requires significant revision or supplementary ESP materials to adequately prepare students for higher education.

Keywords: English for Specific Purposes (ESP), textbook evaluation, scientific stream, secondary education, needs analysis, Algeria.

الملخص

أصبحت اللغة الإنجليزية أداةً أساسيةً للتواصل المتخصص، مما أفضى إلى تنامي أهمية الإنجليزية لأغراض خاصة (في المجالين الأكاديمي والمهني. وفي السياق التعليمي الجزائري، يحتاج طلاب التعليم الثانوي في الشعبة العلمية ESP) إلى مهارات لغوية متخصصة تؤهلهم للتعليم العالي، حيث تُدرّس المواد العلمية في الغالب بلغات أجنبية. غير أن تدريس اللغة الإنجليزية على مستوى التعليم الثانوي يعتمد في كثير من الأحيان على مناهج الإنجليزية العامة بدلاً من المنهجيات المتخصصة في الإنجليزية لأغراض خاصة.

تهدف هذه الدراسة إلى تقييم مدى ملاءمة وفاعلية محتوى الإنجليزية لأغراض خاصة في الكتاب المدرسي الرسمي المقرر على طلاب السنة الثانية ثانوي في الشعبة العلمية بالجزائر. ولتحقيق هذا الهدف، أُجري «Getting Through» تحليل وصفي تحليلي لمحتوى الكتاب المدرسي، يتناول موضوعاته والمفردات المتخصصة فيه ونصوصه القرائية ومهامه التربوية، وذلك في ضوء ستة معايير راسخة لتقييم مواد الإنجليزية لأغراض خاصة. وقد استُكمل هذا التحليل الأساسي ببيانات جُمعت عبر استبانة وُزعت على 31 أستاذاً للغة الإنجليزية في المرحلة الثانوية بولاية الطارف.

تكشف النتائج أنه على الرغم من الاعتراف الواسع بضرورة التدريس المتخصص في المجال العلمي، يعتمد الكتاب المدرسي اعتماداً كبيراً على الإنجليزية العامة، إذ يقتصر المحتوى العلمي ذو الصلة في معظمه على وحدة دراسية واحدة. ويفتقر الكتاب إلى المهام العلمية والنصوص الأصيلة والمفردات المتخصصة اللازمة لإعداد الطلاب بصورة كافية للتعليم العالي. وعليه، فإنه بحاجة إلى مراجعة جوهرية أو إلى مواد تكميلية متخصصة في الإنجليزية لأغراض خاصة تلبيّة للاحتياجات اللغوية والأكاديمية لطلاب الشعبة العلمية.

الكلمات المفتاحية: الإنجليزية لأغراض خاصة، تقييم الكتاب المدرسي، الشعبة العلمية، التعليم الثانوي، تحليل

الاحتياجات، الجزائر

Table of content

Declaration of Originality	i
Dedication 1	ii
Dedication 2	iii
Acknowledgement	iv
Abstract	v
Abstract in Arabic	vi
List of Tables	xiii
List of Figures	xiv
List of abbreviations.....	xv
CHAPTER ONE Introductory Chapter.....	16
1.1 Background of the Study.....	16
1.2 Statement of the Problem	17
1.3 Aim of the Study	17
1.4 Research Questions	17
1.5 Hypotheses	18
1.6 Significance of the Study	18
1.7 Research Design Overview	19
1.8 Structure of the Dissertation	19

Conclusion	20
CHAPTER TWO Theoretical Framework of English for Specific Purposes	21
Introduction	21
2.1 English for Specific Purposes: An Overview	21
2.1.1 Definition of ESP	21
2.1.2 Origins and Historical Development of ESP	22
2.1.3 ESP versus General English (GE)	23
2.1.4 Rationale for ESP in Educational Contexts	24
2.2 Types and Branches of ESP	25
2.2.1 Classification of ESP	25
2.2.1.1 English for Academic Purposes (EAP)	25
2.2.1.2 English for Occupational Purposes (EOP)	26
2.2.2 English for Science and Technology (EST)	26
2.2.3 ESP for Scientific Streams in Secondary Education	27
2.3 Characteristics and Principles of ESP	27
2.3.1 Key Characteristics of ESP	28
2.3.2 Learner-Centeredness in ESP	28
2.3.3 Needs-Oriented Nature of ESP	29
2.3.4 Authenticity and Relevance of ESP Content	29
2.4 Needs Analysis in ESP	29
2.4.1 Definition and Importance of Needs Analysis	30
2.4.2 Types of Needs	30
2.4.2.1 Target Needs	30
2.4.2.2 Learning Needs	31

2.4.3 Needs Analysis in the Secondary School Context	31
2.5 ESP Syllabus and Course Design.....	32
2.5.1 ESP Syllabus Design.....	32
2.5.2 Content-Based Instruction in ESP.....	32
2.5.3 Language Skills in ESP Courses	33
2.5.3.1 Reading Skills	33
2.5.3.2 Writing Skills	33
2.5.3.3 Listening Skills	34
2.5.3.4 Speaking Skills.....	34
2.6 ESP Materials and Textbook Design.....	34
2.6.1 Role of Teaching Materials in ESP	35
2.6.2 Characteristics of ESP Textbooks	35
2.6.3 Criteria for Evaluating ESP Materials.....	36
2.6.4 Content Relevance in ESP Textbooks	36
2.7 ESP in the Algerian Educational Context	37
2.7.1 English Language Teaching in Algerian Secondary Education	37
2.7.2 Scientific Stream Learners' Needs in Algeria	38
2.7.3 The Place of ESP in Algerian Secondary School Textbooks	39
Conclusion	40
CHAPTER THREE Methodology	41
Introduction	41
3.1 Research Design.....	41
3.2 Research Setting.....	42

3.3 Research Sample	42
3.3.1 Textbook Sample.....	42
3.3.2 Participant Sample	43
3.4 Data Collection Methods	43
3.4.1 Textbook Content Analysis	43
3.4.2 Teacher Questionnaire.....	44
3.5 Research Procedures	44
3.6 Evaluation Criteria for ESP Textbooks	45
3.7 Data Analysis and Validity	46
3.8 Ethical Considerations	46
3.9 Limitations of the Study.....	46
Conclusion	47
CHAPTER FOUR Results.....	48
Introduction.....	48
4.1 Section one: Content Analysis of Getting Through SE2.....	48
4.1.1 Overview of the Textbook.....	49
4.1.2 Criterion 1: Content Relevance.....	50
4.1.3 Criterion 2: Scientific and Technical Vocabulary.....	53
4.1.4 Criterion 3: Authenticity of Texts.....	55
4.1.5 Criterion 4: Relevance to Learner Needs	58
4.1.6 Criterion 5: Academic Skills Development	61
4.1.7 Criterion 6: Learner-Centred Approach	62
4.1.8 Summary of Content Analysis Findings	64

4.1.9 Conclusion of Content Analysis	66
4.2 Section Two: Questionnaire Results	67
4.2.1 Section One: Professional background	67
4.2.2 Section Two: ESP Awareness	68
4.2.3 Section Three: ESP Content in Getting Through	71
4.2.4 Section Four: Language skills and ESP Orientation.	74
4.2.5 Section Five: Teachers' Evaluation and Suggestions	77
Conclusion of Questionnaire Findings	80
CHAPTER FIVE Discussion	81
Introduction	81
5.1 The Content Analysis: What the Evidence Shows	81
5.2 Connecting the Content Analysis to the Questionnaire	82
5.3 Discussion of the Research Questions	85
5.3.1 Research Question One	86
5.3.2 Research Question Two	87
5.3.3 Research Question Three	88
5.4 Evaluation of the Hypotheses	89
5.5 Implications of the Study	90
5.6 Limitations of the Study	91
5.7 Recommendations for the Research Findings	92
5.8 Suggestions for Further Studies	93
Conclusion	93

References	96
Appendices	103
Appendix A: Teacher Questionnaire	103
Appendix B:	105
Selected Extracts from Getting Through.....	105

List of Tables

Table 1: Comparison of Key Characteristics Between EGP and ESP	23
Table 2: Content Relevance of Getting Through SE2 by Unit	50
Table 3: Scientific and Technical Vocabulary Analysis by Unit	53
Table 4: Authenticity of Texts Analysis by Unit	55
Table 5: Learner Needs vs. Textbook Provision	58
Table 6 : Academic Skills Development in Getting Through	61
Table 7: Learner-Centred Features in Getting Through.....	62
Table 8: Summary of Content Analysis Against Six ESP Criteria.....	64
Table 9 : Content Analysis and Questionnaire — Areas of Agreement and Divergence	82
Table 10 : Evaluation of Hypotheses Against Combined Evidence	89

List of Figures

Figure 1 : Teachers' Teaching Experience with the Textbook Getting Through	67
Figure 2 : Teachers' Familiarity with the Textbook	68
Figure 3 : Teachers' Familiarity with the Concept of ESP	52
Figure 4 : Teachers' Perception of the Relevance of ESP to Secondary Education Scientific Stream	69
Figure 5 : The Requirements of Scientific Language Content for Scientific Stream Students	70
Figure 6 : Science Related Topic in Getting Through.....	71
Figure 7 : Scientific Content in Academic Needs	72
Figure 8 : The Adequacy of Scientific Vocabulary in the Textbook	73
Figure 9 : The Role of Reading Text in Higher Scientific Education	73
Figure 10 : The Reading Skills Development Relevance to Scientific Contexts	74
Figure 11 : The Writing Activities Addressed in Getting Through	75
Figure 12 : The Appropriacy of Speaking and Listening Activities for Scientific Communication.....	76

List of abbreviations

CBI: Content-Based Instruction

EAP: English for Academic Purposes

EGP: English for General Purposes

ELT: English Language Teaching

EOP: English for Occupational Purposes

ESP: English for Specific Purposes

EST: English for Science and Technology

et al.: et alia (and others)

GE: General English

NA: Needs Analysis

PDP: Pre, During, Post (Framework for reading/listening lessons)

PPU: Presentation, Practice, Use (Framework for grammar/vocabulary lessons)

STEM: Science, Technology, Engineering, and Mathematics (or Medicine)

CHAPTER ONE

Introductory Chapter

1.1 Background of the Study

English is no longer considered strictly a secondary school subject or a tool for general conversation; it has become an essential instrument for communication across various professional and academic domains worldwide (Crystal, 2003). This shift led to the emergence of English for Specific Purposes (ESP) as an approach that prioritizes the learner's specific communicative needs within their academic or professional contexts (Hutchinson & Waters, 1987; Dudley-Evans & St. John, 1998).

In the Algerian educational context, English textbooks are designed to meet national curriculum objectives and to prepare students for university-level studies. However, the extent to which these textbooks genuinely reflect ESP principles remains unclear. *Getting Through*, the textbook prescribed for second-year secondary education in the scientific stream, serves as the official instructional material. Nevertheless, limited research has examined whether this textbook provides discipline-specific scientific English rather than General English.

In order to respond to the need identified above, this study aims to evaluate whether the ESP content in the *Getting Through* textbook fulfils the learners' specific needs. It analyzes the topics, vocabulary, tasks, and skills presented in the textbook for second-year secondary scientific stream students.

1.2 Statement of the Problem

English language instruction for scientific stream students in Algerian secondary schools relies largely on the content prescribed in the English textbook *Getting Through*. It is expected to support the learners' academic preparation for higher education. Yet, its alignment with ESP principles remains uncertain, which raises concerns about its effectiveness in meeting students' discipline-specific language requirements.

1.3 Aim of the Study

This study aims to evaluate the extent to which the textbook *Getting Through* incorporates scientific and technical vocabulary and discipline-specific reading texts relevant to the academic needs of second-year scientific stream students. The evaluation focuses on two dimensions: the presence and adequacy of scientific vocabulary, and the relevance of reading texts to higher education preparation.

1.4 Research Questions

Main Question

To what extent does the textbook *Getting Through* for second-year scientific stream students in Algerian secondary schools meet the principles of English for Specific Purposes?

Sub-questions

1. To what extent do the topics and themes presented in the textbook correspond to the academic and scientific needs of scientific stream students?

2. How adequately does the textbook incorporate vocabulary and language features relevant to scientific disciplines?

3. How effectively do the tasks and activities support the development of language skills required in scientific and academic contexts?

1.5 Hypotheses

In response to the research questions, the following hypotheses are proposed:

1. The topics and themes in *Getting Through* largely emphasize General English rather than discipline-specific scientific English, limiting their relevance to the students' academic needs.

2. The textbook insufficiently incorporates the specialized vocabulary and linguistic structures required for scientific disciplines.

3. The tasks and activities presented in the textbook do not effectively prepare students for academic and scientific communication within their future fields of study.

1.6 Significance of the Study

This study is significant because it addresses a critical gap in the Algerian secondary education system—specifically, the academic preparation of scientific stream students for higher education. Since university-level scientific modules are predominantly taught in foreign languages, students require discipline-specific English. By evaluating the official textbook *Getting Through*, this research provides valuable insights for curriculum developers, textbook designers, and EFL teachers. It highlights the practical need to shift

from a General English approach to an ESP-oriented curriculum, ultimately aiming to improve the communicative and academic competence of Algerian science students.

1.7 Research Design Overview

To achieve the aims of this study, a descriptive—analytical design was adopted. The primary instrument is a systematic content analysis of the *Getting Through* textbook, examining its alignment with established ESP criteria. This analysis was supplemented by a questionnaire administered to secondary school English teachers in the city of El Tarf, providing contextual evidence that supports the textual findings.

1.8 Structure of the Dissertation

This dissertation is divided into five main chapters, in addition to a general introduction and a general conclusion.

Chapter One introduces the background of the study, the research problem, aims, research questions, hypotheses, significance, and structure.

Chapter Two establishes the theoretical framework, reviewing the literature on English for Specific Purposes (ESP), needs analysis, and syllabus design.

Chapter Three outlines the methodology employed, detailing the research design, setting, sample, and data collection instruments.

Chapter Four presents the results obtained from both the textbook content analysis and the teacher questionnaire.

Chapter Five discusses and interprets these findings in relation to the research questions and hypotheses, concluding with pedagogical implications and recommendations for future research.

Conclusion

This chapter has introduced the research context by highlighting the growing importance of ESP in Algerian secondary education. It identified the gap between the scientific stream's language needs and the content of the Getting Through textbook, stated the aim of the study, and presented the research questions and hypotheses that guide the investigation. The following chapter establishes the theoretical framework upon which this study is built.

CHAPTER TWO

Theoretical Framework of English for Specific Purposes (ESP)

Introduction

This chapter establishes the theoretical foundation of the study. It begins by defining English for Specific Purposes and distinguishing it from General English, then reviews the main branches of ESP with a focus on English for Science and Technology. The chapter further examines the core principles of ESP, including needs analysis and learner-centeredness, before reviewing ESP syllabus design, material evaluation criteria, and the place of ESP within the Algerian secondary education system.

2.1 English for Specific Purposes: An Overview

This section provides a foundational overview of English for Specific Purposes (ESP). It explores the definitions of the field, traces its historical development and origins, contrasts its pedagogical goals with those of General English (GE), and outlines the functional rationale for integrating ESP into educational contexts.

2.1.1 Definition of ESP

English for Specific Purposes (ESP) is a specialized approach to language teaching that prioritizes the specific communicative needs of learners within particular academic or professional domains. While it covers fields such as medicine, engineering, and the sciences, all decisions regarding content and method are based on the learner's reason for learning (Hutchinson & Waters, 1987). This perspective is supported by Paltridge and Starfield (2013), who emphasize that ESP content is oriented to the specific needs of the learners, focusing on the genres and skills appropriate to their specific activities. According to Hyland (2022), ESP

aims to assist learners in mastering the particular variety of English they need, making it distinct from the English typically learned at school (General English), which rarely prepares students for the specific communication practices of higher education or work.

2.1.2 Origins and Historical Development of ESP

The emergence of ESP was driven by significant global changes in the 1960s. Hutchinson and Waters (1987) argue that there were three main reasons for this development. First, the explosion of technology and trade after the Second World War (1945) created a demand for a shared language. As a result, the focus shifted from learning English for "culture" to using it as a tool for communication. Second, scholars stopped looking at the language only as "grammar rules" and began to analyze how language actually varies depending on the context. Furthermore, the movement was influenced by a shift in educational psychology which reinforced the importance of learners' motivation, indicating that students learn more effectively when the content is directly relevant to their specific academic interests. As a result of these historical developments, the history of the field expanded. According to Salmani-Nodoushan (2020), the movement has successfully transitioned from a practical teaching approach into an autonomous subfield of Applied Linguistics, focused on the complex analysis of specialized discourse. The historical theories of Hutchinson and Waters' practical application spread to various national contexts by the late 1970s. This expansion is exemplified by the Brazilian National ESP Project, where the approach was adapted to meet the specific academic demands of the research community through teacher-led material design (Ramos, 2008). This progression highlights the shift of

ESP from a practical classroom tool to a specialized and autonomous academic discipline (Salmani-Nodoushan, 2020).

2.1.3 ESP versus General English (GE)

The primary distinction between English for Specific Purposes (ESP) and General English (GE) is defined by their goals. According to Cigan and Kordić (2013), EGP learners often focus on a broad and open-ended approach to the language system, whereas ESP learners require English to communicate technical or business information in specific occupational or academic settings. The learners also differ significantly. GE is for schoolaged children, while ESP is usually for adults or university students. The specific distinctions between these two approaches are summarized in Table 1:

Table 1:

Comparison of Key Characteristics Between EGP and ESP

Features	EGP (English for General Purposes)	ESP (English for Specific Purposes)
Learner Profile	School-aged children	Adults / university students
Goals	Broad, open-ended language acquisition	Specific communicative needs in academic or professional contexts
Content Focus	General language skills	Discipline-specific vocabulary and communication
Approach	General curriculum	Needs-based, targeted instruction
Teaching Role	Traditional language teacher	Needs analyst, material developer, researcher

Outcomes	General linguistic proficiency	Pragmatic workplace or academic competence
----------	--------------------------------	--

As illustrated in the table, the fundamental divergence lies in the transition from a generalized, school-aged curriculum to a highly targeted, adult-oriented instructional model that prioritizes pragmatic workplace or academic competence over general linguistic proficiency.

This shift in learners' profile directly affects the role of teachers who must move beyond traditional instruction to become "practitioners". As described by Islam (2023), this role involves acting as needs analyst, material developer, and researcher to ensure the alignment of course content with students' professional fields. Ultimately, research by Bankole et al. (2023) shows that this specific focus makes ESP more effective for university students, as it prepares them for real-world communication and experiences better than General English does.

2.1.4 Rationale for ESP in Educational Contexts

The rationale for English for Specific Purposes (ESP) within the educational system is defined by a functional necessity of language in relation to the learner's specific goals, directly responding to the limitations of General English in meeting specialized academic demands. As highlighted by Hyland and Jiang (2021), ESP distinguishes itself by focusing on particular, purposeful uses of language that are often abstract and technical. One key feature of this rationale is learning efficiency. Unlike General English, which covers a broad range of language skills, ESP works as a strategic filter that prioritizes specific vocabulary and communication styles essential to the learner's field. As Paltridge and Starfield (2013) suggest, this targeted approach allows for a more 'economical' use of instructional time. By setting aside unnecessary linguistic features, ESP helps students—especially those in demanding scientific streams—master the precise communication tools they need within a limited period of time.

2.2 Types and Branches of ESP

The field of ESP encompasses various sub-disciplines tailored to specific academic and professional domains. This section outlines the primary classifications of ESP, including English for Academic Purposes (EAP), English for Occupational Purposes (EOP), and English for Science and Technology (EST), before contextualizing its application within secondary education scientific streams.

2.2.1 Classification of ESP

English for Specific Purposes (ESP) is not a single unified discipline, but a goal-oriented approach that reflects the diversity of learners' needs. A key concept in its classification is the "specificity continuum" (Bhatia et al., 2011), which presents ESP as a range from General ESP, which addresses broad academic skills such as essay writing, to highly Specific ESP, which focuses on the specialized language of particular fields such as medicine or law. Building on this, Dudley-Evans (1998) proposes a widely accepted division of ESP into two main branches: English for Academic Purposes (EAP), which focuses on language use in educational and research contexts, and English for Occupational Purposes (EOP), which focuses on language used in professional settings. This division ensures that ESP courses are directly linked to either academic or workplace demands.

2.2.1.1 English for Academic Purposes (EAP)

English for Academic Purposes (EAP) is defined as the branch of ESP that addresses the communicative needs of learners in educational and research contexts. Within this field, modern EAP has shifted toward a competence-oriented perspective. As Bortnyk (2021) notes, the focus is now on developing students' ability to use English as a functional tool to perform academic tasks, such as explaining processes or solving problems, rather than limiting instruction to the acquisition of forms. EAP also operates along a specificity continuum (Bhatia

et al., 2011), ranging from general academic skills to more specialized, discipline-based language. In the context of the Algerian secondary school system, EAP instruction aims to bridge the gap between general linguistic knowledge and the technical demands of the scientific stream.

2.2.1.2 English for Occupational Purposes (EOP)

English for Occupational Purposes (EOP) is the branch of ESP designed to meet the communicative demands of the workplace. It goes beyond basic linguistic knowledge to develop professional communication competence, helping learners use English effectively to perform appropriately in professional contexts. To be successful and enhance long-term employability, EOP courses must be based on a detailed Taxonomy of Needs that includes not only language but also the psychological and environmental context of the workplace (Wannas & Hassan, 2024).

2.2.2 English for Science and Technology (EST)

English for science and technology (EST) is the ESP sub-discipline that is designed to meet the communicative needs of students and professionals in scientific, technical, and engineering fields. According to Paltridge and Starfield (2013), EST is defined by its "rhetorical nature." It isn't just about vocabulary; it is about how scientists use language to perform functions like describing a process, defining a concept, or developing arguments. It is characterized by specific linguistic features, such as technical lexis and the use of the passive voice to ensure objectivity.

One of the main difficulties in EST is the variety of genres students are expected to handle. Diaz-Santos (2000) suggests that scientific information can be accessed through multiple genres, including "technothrillers" or popular science, which can help bridge the gap between expert knowledge and student understanding. The effectiveness of EST also depends

on how relevant the materials are to current scientific developments. Including modern topics helps align learning with students' academic and professional needs, while supporting their shift from general English to specialized competence (Liao & Chen, 2012).

2.2.3 ESP for Scientific Streams in Secondary Education

In the Algerian secondary school context, integrating ESP into scientific streams is essential for preparing students for higher education. This preparation is critical because most university-level scientific and technical modules are delivered in English or French, requiring a high level of specialized linguistic competence. However, research highlights a significant mismatch between this goal and current classroom practice. Behira (2024) points out that although first-year secondary learners are oriented into distinct scientific and literary streams, they continue to use the same general English textbooks, such as *Getting Through*. This neglect of the "specialty language continuum" prevents a smooth transition from secondary school to university-level science (Behira, 2024).

The difficulties faced by these students are primarily linguistic and psychological. Hanifi (2021) identifies that students struggle with the complex "nominalization process" and technical lexis found in scientific reading texts. Furthermore, a lack of stream-specific content leads to a decrease in learner motivation and self-confidence (Bouguenous, 2017). Consequently, scholars argue that for ESP to be effective in Algerian high schools, it must move away from a general approach toward content-based instruction that directly relates to the students' scientific specialties.

2.3 Characteristics and Principles of ESP

The pedagogical framework of English for Specific Purposes (ESP) is governed by a set of foundational principles that distinguish it from the broader field of English for General Purposes (EGP). These principles ensure that language instruction is not merely a linguistic

exercise but a functional tool tailored to the professional or academic requirements of the learner.

2.3.1 Key Characteristics of ESP

The foundation of ESP is built on specific characteristics that distinguish it from general English. According to Mirkomilova and Azimova (2026), ESP must be designed to meet the specific needs of the learner, using the same methods and conventions their field demands. As the field has developed over time, researchers have begun to look at ESP in a broader way. Bhatia, Anthony, and Noguchi (2011) note that learning ESP involves more than just vocabulary and grammar structures. Instead, they suggest that it involves learning how to participate in the professional world through language. They introduce the concept of "interdiscursivity," which captures how language connects learners to the real practices of their profession. In other words, mastering ESP means developing what they call "systemic literacy"—the ability to handle the different genres and communication styles that define a particular field (Bhatia et al., 2011).

2.3.2 Learner-Centeredness in ESP

In a Master's level ESP framework, the learner is viewed as an "agent" of their own educational path. Abdallah (2025) argues that centring curricula on learners' realistic needs is an "imperative" for fostering meaningful acquisition. This approach moves away from teacher-led instruction toward a model where the learner's pre-existing subject knowledge—such as science for secondary stream students—is respected and utilized. The notion of learner agency is critical, emphasizing the student's active participation. In modern ESP classes, this is often achieved through collaborative learning and project-based concepts that encourage students to take responsibility for their successful outcomes (Háhn & Podlášková, 2016).

2.3.3 Needs-Oriented Nature of ESP

The most defining principle of ESP is its strictly needs-oriented nature. Unlike EGP, where the syllabus is often comprehensive and generic, the ESP syllabus is a pragmatic response to a Needs Analysis (NA). Lesiak-Bielawska (2015) asserts that NA is the cornerstone of ESP practice, serving as the starting point for materials selection and course design. This principle dictates that instruction should focus only on the "Target Situation" requirements. For the scientific stream in Algeria, this implies that the English curriculum should prioritize the linguistic functions (defining, describing, and reporting) that students will encounter in their future scientific careers, rather than general conversational skills.

2.3.4 Authenticity and Relevance of ESP Content

Authenticity in ESP refers to both the nature of the texts used and the tasks performed by the students. Torregrosa Benavent and Sánchez-Reyes Peñamaría (2011) posit that authentic materials are essential because they "reproduce an immersion environment" and provide a realistic context for tasks. However, using authentic materials in an ESP classroom requires careful selection. Blagojević (2013) suggests that for a text to be truly authentic, it must serve a "real-life communicative purpose" and be relevant to the students' actual or anticipated needs. Within the scientific stream, this involves using original scientific texts, manuals, or research reports. While these materials can be linguistically dense, they are necessary for preparing students for the "real-world" specialized language of higher education, provided they are accompanied by authentic learning tasks (Blagojević, 2013).

2.4 Needs Analysis in ESP

Needs analysis serves as the fundamental starting point for any ESP program, dictating course content and pedagogical approaches. This section defines the concept, categorizes the

distinct types of target and learning needs, and examines the specific application of needs analysis within the secondary school context.

2.4.1 Definition and Importance of Needs Analysis

Needs analysis is widely recognized as the cornerstone of English for Specific Purposes (ESP) course design, serving as a systematic process to determine the aims and content of a language program. Its central role is heavily emphasized in ESP literature; Flowerdew (2025) highlights its foundational status in pedagogy, while Widodo (2017) argues that effective needs analysis requires integrating multiple complementary approaches. Ultimately, what distinguishes ESP from English for General Purposes (EGP) is this rigorous focus on the specific linguistic and communicative requirements of learners within particular academic or professional domains (Dudley-Evans, 1998), ensuring instructional content aligns directly with target situation demands.

2.4.2 Types of Needs

Needs in ESP are complex and multidimensional. As demonstrated by Poedjiastutie and Oliver (2017), they frequently reflect the intersecting expectations of learners, educators, and institutions. To organize this complexity, Hutchinson and Waters (1987) established a fundamental distinction between target needs and learning needs. Furthermore, adopting a learner-centered perspective (Hossain, 2013) reinforces the importance of balancing the objective requirements of the target context with the subjective realities of the learners.

2.4.2.1 Target Needs

Target needs refer to what learners are expected to do in the target situation. Hutchinson and Waters (1987) subdivide these into three components: necessities, lacks, and wants. Necessities correspond to the objective linguistic skills and discourse conventions required by the target environment. Lacks represent the operational gap between current language

proficiency and required competence. Wants encompass the learners' subjective expectations and motivations regarding their language learning.

2.4.2.2 Learning Needs

While target needs focus on the instructional destination, learning needs focus on the optimal route to reach it. They encompass the cognitive processes, preferred learning styles, prior knowledge, and environmental factors through which language acquisition occurs (Hutchinson & Waters, 1987). Addressing learning needs ensures that pedagogical methods are explicitly aligned with how learners best acquire specialized language, rather than focusing exclusively on end goals (Hossain, 2013).

2.4.3 Needs Analysis in the Secondary School Context

Needs analysis in Algerian secondary education must account for system constraints and the need for a gradual transition from general English (EGP) to discipline-specific language. Behira (2024) emphasizes that identifying these transitional needs is paramount for establishing a “specialty language continuum” that connects secondary education with university-level academic discourse. Learners' perceptions are also essential, as Hanifi (2021) shows that attitudes toward ESP materials strongly influence engagement and learning preferences.

Empirical studies highlight significant gaps in learners' skills. Bouguenous (2017) found that students struggle with scientific writing due to weak organization, limited writing mechanics, and insufficient scientific background knowledge, along with affective barriers such as low motivation and self-confidence. These findings confirm the need for comprehensive needs analysis to address both linguistic and contextual gaps and ensure materials prepare students for higher education demands.

2.5 ESP Syllabus and Course Design

Translating identified learner needs into actionable pedagogy requires careful syllabus and course design. This section discusses the theoretical principles of ESP syllabus construction, explores the role of Content-Based Instruction (CBI), and details the contextualized development of reading, writing, listening, and speaking skills.

2.5.1 ESP Syllabus Design

Syllabus design in ESP involves translating the findings of needs analysis into course objectives, content, and instructional activities. According to Mirkomilova and Azimova (2026), the fundamental principles of ESP dictate that course design must align with the specific aims and target situations of the learners. The imperative of adopting a learnercentered approach is further emphasized by Abdallah (2025), who argues that realistic learner needs should guide content selection over generalized language frameworks. In this specialized context, the traditional role of the educator shifts. Anthony (2007) notes that ESP practitioners often need to familiarize themselves with the discourse and practices of the target discipline before designing appropriate instructional materials. Consequently, as Lesiak-Bielawska (2015) highlights, effective materials selection depends heavily on the teacher's ability to source and sequence discipline-specific content that matches established learner goals.

2.5.2 Content-Based Instruction in ESP

Content-Based Instruction (CBI) is a pedagogical approach frequently utilized in ESP course design, shifting the focus from isolated linguistic structures to the acquisition of language through subject-matter content (Hinkel, 2011). In this framework, language serves as a vehicle for disciplinary knowledge. The efficacy of CBI relies on the use of authentic materials; Torregrosa Benavent and Sánchez-Reyes Peñamaría (2011) argue that exposing learners to unadapted texts from their fields enhances both linguistic competence and

pragmatic awareness. By integrating realistic scenarios, CBI ensures the language learned is transferable to students' future academic environments (Paltridge & Starfield, 2013). To maximize the delivery of this specialized content, modern CBI frameworks increasingly incorporate interactive tools and collaborative assignments to create more engaging, learnercentered environments (Háhn & Podlášková, 2016).

2.5.3 Language Skills in ESP Courses

Within ESP course design, the selection of content is closely linked to the development of language skills required in the target situation. Consequently, ESP instruction seeks to integrate skill development with disciplinary content. Rather than developing macroskills in a vacuum, reading, writing, listening, and speaking are systematically contextualized within the specialized discourse of the target situation (Paltridge & Starfield, 2013).

2.5.3.1 Reading Skills

Reading is frequently prioritized in academic ESP settings, particularly within scientific streams. The objective is to equip learners to navigate specialized text organization and comprehend technical vocabulary. Utilizing authentic materials supports this goal; as Torregrosa Benavent and Sánchez-Reyes Peñamaría (2011) observe, engaging with realworld scientific texts develops essential strategies such as skimming, scanning, and inferencing. Furthermore, Paltridge and Starfield (2013) note that effective ESP reading instruction requires learners to critically deconstruct academic literature to understand underlying disciplinary conventions.

2.5.3.2 Writing Skills

Writing in ESP focuses on producing texts that adhere to specific disciplinary conventions. It requires the mastery of academic discourse, the maintenance of an objective tone, and the construction of logical argumentation (Hinkel, 2011). Given the complexity of

disciplinary writing, Lesiak-Bielawska (2015) emphasizes the importance of carefully sequenced writing tasks. For learners in scientific streams, instruction typically moves through guided exercises—such as describing laboratory processes—toward independent academic composition.

2.5.3.3 Listening Skills

Listening comprehension in ESP is essential for engaging with lectures, academic presentations, and professional discourse. Instruction is designed to develop the ability to extract main ideas, recognize rhetorical cues, and navigate complex spoken information. The integration of modern tools and interactive resources has enhanced the ability to simulate authentic listening environments, allowing for contextualized practice (Háhn & Podlášková, 2016).

2.5.3.4 Speaking Skills

Although historically marginalized in traditional academic language courses, speaking skills are increasingly recognized as essential for interactive participation in specialized communities. ESP speaking tasks simulate target situations, requiring learners to articulate concepts, deliver presentations, and engage accurately in subject-specific discourse to foster communicative competence (Paltridge & Starfield, 2013).

2.6 ESP Materials and Textbook Design

The selection and design of instructional materials are critical to the success of specialized language courses. This section examines the defining characteristics of ESP textbooks, establishes the theoretical criteria for their evaluation, and emphasizes the absolute necessity of content relevance in material design.

2.6.1 Role of Teaching Materials in ESP

ESP instruction relies heavily on quality teaching materials. Pašalić and Plančić (2018) consider course books the second most important element in language teaching after the instructor. According to Hutchinson and Waters (1987), ESP is structured around the learner's specific needs, and therefore, materials selection must be highly deliberate to address these needs. In contrast to general English textbooks, ESP materials are designed for particular academic or professional fields such as medicine, engineering, business, or law (Dudley-Evans, 1998).

The effectiveness of ESP materials depends on their relevance to learners' needs and ESP principles. Medrea and Rus (2012) emphasize that materials should be developed through careful needs analysis and should incorporate authentic language, up-to-date content, and opportunities for independent learning. As a result, teaching materials play a key role in developing learners' specialized communication skills and achieving course objectives.

2.6.2 Characteristics of ESP Textbooks

Effective ESP textbooks possess features that distinguish them from general English materials and address learners' specialized needs. According to Bonabi (2008), ESP materials should be designed through the integration of language descriptions, learning theories, and needs analysis. A key characteristic is authenticity; textbooks should incorporate real-world materials such as academic articles, technical documents, and professional communications to expose learners to language used in their target fields.

ESP materials must also be learner-centered and adaptable. Carbajosa Palmero (2003) argues that they should reflect real professional situations while remaining relevant to changing academic and workplace demands. Furthermore, Lesiak-Bielawska (2015) emphasizes the

importance of discipline-specific vocabulary, contextualized grammar, communicative tasks, and visual aids that support understanding of specialized content. Together, these features enable ESP textbooks to develop learners' professional and academic communication skills effectively.

2.6.3 Criteria for Evaluating ESP Materials

ESP materials are evaluated using criteria that differ from those applied to general language textbooks because they must address specific academic and professional needs (Lesiak-Bielawska, 2015). A key criterion is authenticity. Authentic texts expose learners to the terminology, discourse, and conventions of their field, while authentic tasks require them to perform realistic activities such as interpreting data, analyzing graphs, and summarizing findings (Torregrosa Benavent & Sánchez-Reyes Peñamaría, 2011; Blagojević, 2013).

However, authenticity alone does not ensure effectiveness. Content relevance is equally important, as materials connected to learners' specialization and future goals enhance motivation and engagement (Torregrosa Benavent & Sánchez-Reyes Peñamaría, 2011). Furthermore, evaluating ESP materials necessitates the application of established theoretical frameworks. While general textbook evaluation models often serve as foundational checklists, they are frequently adapted in the context of ESP to prioritize target situation analysis and content relevance, utilizing specialized evaluation criteria (Lesiak-Bielawska, 2015; Dudley-Evans, 1998). Applying such systematic evaluation checklists ensures that the textbook not only provides linguistically appropriate language but also successfully mediates the specific disciplinary content required by the learners.

2.6.4 Content Relevance in ESP Textbooks

Content relevance is a key criterion in ESP textbook evaluation because materials that do not reflect learners' academic and professional contexts can reduce engagement and hinder

language development. Rahmawati et al. (2024) argue that effective materials should incorporate current professional practices and realistic scenarios, as mismatches between textbook content and learners' needs can negatively affect productive skills, particularly speaking and writing. Relevance must also be discipline-specific, as learners from different fields have distinct expectations and communicative requirements (Kočović Pajević, 2025). Similarly, Karimnia and Jafari (2017) report that students often view generic, nonprofessional activities as inadequate. Therefore, ESP materials should be closely aligned with learners' specializations and developed in consultation with subject-matter experts.

2.7 ESP in the Algerian Educational Context

To ground the theoretical framework in the target setting of this study, this final section contextualizes ESP within the Algerian educational system. It reviews the current state of English language teaching in Algerian secondary education, identifies the specific communicative needs of scientific stream learners, and critically examines the current place of ESP in national textbooks.

2.7.1 English Language Teaching in Algerian Secondary Education

English is currently taught as the second foreign language in Algerian middle and secondary schools. Although not widely used in everyday communication, its increasing importance in international education, science, technology, and global communication has led Algerian authorities to strengthen its role in the national curriculum (Slimani, 2016). Since the early 2000s, several reforms have been implemented to improve language teaching and promote greater openness to international knowledge and communication (Rezig, 2011).

Pedagogically, secondary education syllabi aim to develop a broad range of skills. Alongside the core language abilities—listening, speaking, reading, and writing—they

emphasize socio-cultural and academic competencies, including text analysis, self-directed learning, and critical thinking (Slimani, 2016). However, these objectives are often constrained by limited instructional time, lack of exposure to English outside the classroom, and a gap between curricular expectations and learners' actual proficiency. This gap is particularly evident in scientific-stream classes, where instruction still focuses largely on general language structures, while students require specialized vocabulary to interpret data, describe processes, and engage with scientific content (Messerehi, 2014).

2.7.2 Scientific Stream Learners' Needs in Algeria

For Algerian science students, learning English is primarily functional, aimed at interpreting laboratory data, reading technical documents, and engaging with scientific research (Ghounane, 2022; Boudjemaa & Labed, 2021). This instrumental motivation reflects the dominance of English in global science, where it is viewed as essential for accessing research and participating in the international scientific community (Ghounane, 2022; Elmechta, 2020).

To meet these demands, learners must go beyond general English and master scientific discourse, including technical vocabulary, formal grammar, and discipline-specific text structures (Boudjemaa & Labed, 2021). They also need advanced reading skills for academic literature and productive skills for writing and presenting scientific work according to international standards.

However, a gap remains between these needs and current instruction in Algeria, where teaching still relies on general English rather than discipline-specific content (Assassi, 2021). As a result, students struggle with scientific terminology and complex structures, a situation worsened by limited instructional time and low academic emphasis on English (Gouabi, 2023;

Assassi, 2021). This mismatch highlights the need for more ESP-oriented instruction aligned with scientific communication requirements.

2.7.3 The Place of ESP in Algerian Secondary School Textbooks

In Algerian secondary schools, English is a compulsory second foreign language but is mainly taught through general English Language Teaching (ELT) approaches rather than ESP-oriented instruction. As Messerehi (2014) notes, secondary-level content remains generalized and culturally focused, emphasizing basic structures and communicative functions that do not meet the needs of scientific-stream learners. This creates a clear mismatch between textbook content and learners' academic requirements. Boudjemaa and Labed (2021) show that students struggle because materials do not reflect real scientific tasks such as writing research papers or interpreting technical discourse. Similarly, Assassi (2021) argues that English is treated as a simplified version of general English without proper needs analysis, resulting in textbooks that focus on basic communication rather than scientific genres, terminology, and rhetorical conventions.

This gap has serious consequences for later academic success. Students entering university without exposure to scientific English lack the skills required for specialized academic communication, which limits their research participation and publication potential (Ghounane, 2022; Boudjemaa & Labed, 2021). Boudersa (2018) adds that the absence of ESP-based training at the secondary level forces university teachers to focus on remediation rather than advanced instruction. This situation motivates the present study, which analyzes the *Getting Through* textbook to evaluate its alignment with scientific-stream learners' academic needs and the extent to which it supports ESP requirements.

Conclusion

This chapter has established that ESP is fundamentally needs-driven, discipline-specific, and learner-centered. It identified EST as the most relevant branch for scientific stream students, reviewed the principles of needs analysis and materials evaluation, and highlighted the absence of a dedicated ESP approach in Algerian secondary school textbooks. This theoretical foundation justifies the methodological approach adopted in the following chapter.

CHAPTER THREE

Methodology

Introduction

This chapter delineates the comprehensive research methodology employed to investigate the relevance of English for Specific Purposes (ESP) content within the *Getting Through* textbook, specifically designed for second-year secondary education students in the scientific stream. Researching the intersection of curriculum design and ESP necessitates a rigorous framework that can account for both the structural contents of the material and the pedagogical experiences of the educators using it.

Consequently, this chapter provides an exhaustive account of the research design, the selection of the textbook and participant samples, and the specific instruments used for data collection. Furthermore, it outlines the analytical framework and the criteria used to evaluate the materials, ensuring a transparent and replicable process that aligns with the academic standards of the Algerian secondary education research context.

3.1 Research Design

This study adopts a descriptive-analytical research design. The primary instrument is a systematic content analysis of the textbook *Getting Through*, which examines the material against predefined ESP evaluation criteria. This approach ensures objectivity and replicability, as the analysis follows a consistent coding framework applied uniformly across all units of the textbook.

In addition to the content analysis, a supplementary questionnaire was administered to 31 secondary school English teachers in the wilaya of El Tarf. The purpose of this questionnaire is not to generate independent findings but to provide contextual supporting evidence that complements the textual analysis. The questionnaire data helps contextualize the content analysis results by capturing teachers' classroom observations and professional experience with the textbook.

3.2 Research Setting

This study was conducted in secondary schools located in the wilaya of El Tarf, Algeria. These schools follow the official Algerian secondary education curriculum and use the *Getting Through* textbook as the prescribed instructional material for Year 2 scientific stream students.

The research setting was selected because it provides direct access to teachers who regularly teach the textbook under investigation. Furthermore, the educational environment reflects the realities of English language teaching in Algerian public secondary schools, making the findings more contextually relevant and reliable.

3.3 Research Sample

3.3.1 Textbook Sample

The primary textbook under examination in this study is *Getting Through*, officially prescribed for Year 2 secondary education students in the scientific stream in Algeria. This textbook was selected as the focus of analysis because it is the official instructional material used with scientific stream students at this level, making it a crucial artifact for understanding how ESP principles are implemented in the Algerian secondary education context. The textbook represents a real-world example of language teaching materials and provides concrete evidence of how ESP content is presented to learners in this specific educational context.

3.3.2 Participant Sample

This study involved 31 English teachers who participated through questionnaire responses. These teachers were recruited from secondary schools in the wilaya (province) of El Tarf, Algeria. Participants met the following inclusion criteria: (1) they have taught or are currently teaching the *Getting Through* textbook to Year 2 scientific stream students, (2) they have direct classroom experience with this specific textbook and student population, and (3) they agreed to participate in the research by completing the questionnaire.

The selection of teachers from El Tarf provides geographic consistency and ensures that participants are familiar with the local educational context and student needs. A sample size of 31 teachers was deemed sufficient to identify recurring patterns in how the textbook is perceived in practice, providing contextual support for the content analysis findings, as it is large enough to identify patterns in teacher perceptions while remaining manageable for in-depth analysis.

3.4 Data Collection Methods

3.4.1 Textbook Content Analysis

The content analysis was conducted through a systematic, unit-by-unit examination of the textbook to ensure no ESP-related elements were overlooked. Each unit was scrutinized for five specific components :

- **Topics and Themes:** Identifying if subjects relate to science, technology, engineering, or medicine (STEM) relevant to scientific stream students.
- **Vocabulary:** Assessing the frequency of technical terms and whether they are presented in authentic contexts representative of scientific fields.

- **Reading Texts:** Evaluating if texts are adapted from genuine scientific sources like research journals, articles, or reports.
- **Language Tasks:** Documenting whether activities require students to use English for purposes relevant to their future scientific careers or academic studies.
- **Skills Development:** Analyzing whether the four language skills (reading, writing, speaking, and listening) are developed for specific scientific communication or general English purposes.

3.4.2 Teacher Questionnaire

The questionnaire served as a dual-purpose instrument, designed to capture both measurable trends and nuanced opinions through Likert scales and open-ended questions. It was organized into five distinct sections :

- **Section One** (Professional Background): Gathering information on teaching history and experience with the specific textbook.
- **Section Two** (ESP Awareness): Assessing teachers' understanding of ESP as a concept and its importance for scientific stream students.
- **Section Three** (ESP Content in *Getting Through*): Examining perceptions of scientific topics, vocabulary, and reading texts within the book.
- **Section Four** (Language Skills and ESP Orientation): Focusing on the development of communication skills specifically for scientific contexts.
- **Section Five** (Evaluation and Suggestions): Inviting qualitative feedback for improvements and overall pedagogical evaluation.

3.5 Research Procedures

The research procedures were conducted in several stages. First, the *Getting Through* textbook was collected, and a detailed content analysis was performed using the predefined

ESP evaluation criteria. Each unit was examined systematically in terms of scientific topics, technical vocabulary, authenticity of texts, language skills, and learner needs.

Second, the teacher questionnaire was designed and validated before being distributed to secondary school English teachers. The questionnaires were administered either in printed form or electronically depending on teacher availability. After collecting the responses, the data were organized and classified for analysis.

The content analysis findings were then supplemented by the questionnaire data to provide a fuller picture of the textbook's ESP alignment.

3.6 Evaluation Criteria for ESP Textbooks

The content analysis utilized six core criteria derived from established ESP and materials evaluation theory.

- **Criterion 1** (Content Relevance): Examines the alignment of topics with the scientific stream's academic interests and future career paths.
- **Criterion 2** (Scientific and Technical Vocabulary): Assesses the presence, frequency, and contextual quality of discipline-specific terminology.
- **Criterion 3** (Authenticity of Texts): Determines if reading materials reflect real-world language use and are based on genuine scientific sources.
- **Criterion 4** (Relevance to Learner Needs): Questions whether the textbook prepares students for the language demands of their specific scientific studies.
- **Criterion 5** (Development of Academic Skills): Assesses the focus of tasks on academic purposes and scientific communication.
- **Criterion 6** (Learner-Centered Approach): Evaluates if instruction considers students' interests and allows them to be active participants in their learning process.

3.7 Data Analysis and Validity

Data from the textbook analysis was processed through descriptive and comparative methods, comparing actual content against the six criteria established in Section 3.6. Questionnaire data was analyzed quantitatively via frequency distributions and percentages for Likert-scale items, while open-ended responses underwent thematic coding to identify recurring concerns. The validity of the findings rests primarily on the systematic and replicable nature of the content analysis, supplemented by the contextual evidence from teacher feedback.

3.8 Ethical Considerations

Ethical principles were respected throughout the research process. Participation in the study was entirely voluntary, and teachers were informed about the purpose of the research before completing the questionnaire. Participants were also assured that their responses would remain confidential and would only be used for academic purposes.

In addition, anonymity was maintained by avoiding the use of participants' names or any identifying personal information. Furthermore, strict measures were taken to ensure that the collected data were stored securely and analyzed objectively without any manipulation or bias.

3.9 Limitations of the Study

Although this study provides valuable insights into the ESP orientation of the *Getting Through* textbook, certain limitations should be acknowledged. First, the participant sample was limited to teachers from the city of El Tarf, which may reduce the generalizability of the findings to other Algerian regions.

Second, the study focused exclusively on one textbook without including classroom observations or student perspectives. Finally, time constraints and limited access to a larger participant sample may have affected the depth of the analysis.

Conclusion

In summary, this chapter has detailed a descriptive-analytical framework designed to evaluate the ESP alignment of the *Getting Through* textbook. The systematic content analysis, guided by six predefined evaluation criteria, forms the primary method of the study. The supplementary teacher questionnaire provides contextual evidence that supports and enriches the textual findings. This methodology forms empirical basis for the results presented in the following chapter.

CHAPTER FOUR

Results

Introduction

This chapter presents and discusses the findings of the present study. It is organised into two main sections corresponding to the two data-collection instruments employed. The first section analyses the content of the official Algerian second-year secondary EFL textbook *Getting Through SE2* (Riche et al., 2006) using an established analytical framework drawn from the ELT materials evaluation literature. The content analysis is preceded by a description of the coding procedure and the operationalised rating scale used to evaluate each criterion. The second section analyses and interprets the responses collected through the questionnaire administered to teachers of English at the secondary level.

4.1 Section one: Content Analysis of *Getting Through SE2*

Before the unit-by-unit findings are presented, it is necessary to clarify the rating scale applied consistently across all six criteria. Each criterion was assessed against the textbook content and assigned one of three ratings:

- **Met** — the criterion is fully and consistently satisfied across the textbook as a whole, with evidence present in multiple units.

- **Partially Met** — the criterion is addressed to some extent, but only in isolated units or in a limited, surface-level way that does not represent systematic provision across the textbook.

- **Not Met** — the criterion is absent from the textbook or is so insufficiently represented as to provide no meaningful contribution to ESP instruction.

These three categories provide a consistent and transparent framework for comparing the six criteria against each other and for evaluating the textbook's overall ESP alignment. The rating for each criterion is applied at the level of the textbook as a whole, not at the level of individual units, since the purpose of the analysis is to assess whether the textbook as a complete instructional resource meets the needs of scientific stream students across a full academic year.

4.1.1 Overview of the Textbook

Getting Through (Riche et al., 2006) is the official EFL coursebook for second-year secondary students in Algeria, published by the National Authority for School Publications (ONPS). It was authored by B. Riche, H. Ameziane, H. Hami, S.A. Arab and M. Bensemmane. The book comprises eight thematic units and 210 pages. Each unit follows an identical five-part structure: Discovering Language, Developing Skills, Putting Things Together, Where Do We Stand Now?, and Exploring Matters Further. The authors state in the Teacher's Introduction that the textbook adopts a competency-based approach and acknowledge that texts are a mix of authentic and fabricated materials (p. 7).

Crucially, no distinction is made between scientific and literary stream students across seven of the eight units. The sole exception is the Unit 4 project, which differentiates between a scientific stream report and a literary stream ABC of Dreams (pp. 91–93). This

foundational design decision — a single general textbook for all streams — is the structural root of the ESP alignment gap that the following analysis documents.

4.1.2 Criterion 1: Content Relevance

The first criterion examines whether the topics and themes of the textbook align with the academic and scientific needs of scientific stream students. Table 2 presents the unit-by-unit analysis.

Table 2:

Content Relevance of Getting Through SE2 by Unit

Unit	Theme	STEM Relevance	Rating
Unit 1: Signs of the Time	Lifestyle, fashion, food, cultural change	None — entirely socio-cultural and general English	Not Met
Unit 2: Make Peace!	Peace, human rights, international organisations	None — civic and social themes only	Not Met
Unit 3: Waste Not, Want Not	Environment, conservation, energy	Partial — solar energy (SONELGAZ, p. 64), Amazon deforestation (p. 60); environmental	Partially Met

Unit	Theme	STEM Relevance	Rating
		science treated at general level	
Unit 4: Budding Scientist	Science, mathematics, technology	Strong — geometry (pp. 80–81), static electricity (p. 89), Arab science history (pp. 95–96), university open day (p. 86)	Met
Unit 5: News and Tales	Media, journalism, literature, folktales	None — literary and journalistic themes only	Not Met
Unit 6: No Man is an Island	Charity, community solidarity, disasters	None — social and humanitarian themes only	Not Met
Unit 7: Science or Fiction?	Science fiction, speculation, imagination	Marginal — sci-fi vocabulary and conditional speculation;	Partially Met

Unit	Theme	STEM Relevance	Rating
		not genuine scientific discourse	
Unit 8: Business is Business	Commerce, business letters, employment	None — business and occupational English only	Not Met
OVERALL	1 unit directly STEM-oriented; 2 partially; 5 not relevant	12.5% of units fully meet content relevance for scientific stream	NOT MET

Source: Unit-by-unit analysis of Getting Through, Riche et al. (2006).

As Table 2 demonstrates, the overall content relevance criterion is not met. Only Unit 4 (Budding Scientist) is directly oriented toward science and technology. Unit 3 touches on environmental science but treats it at a general awareness level rather than through scientific discourse. The remaining six units deal with lifestyle, peace, literature, journalism, charity and business — themes that belong to general English rather than to the scientific domain. This means that 62.5% of the textbook is entirely unrelated to the scientific stream's academic needs, and only 12.5% (one unit) directly serves those needs.

4.1.3 Criterion 2: Scientific and Technical Vocabulary

The second criterion assesses the presence, frequency and contextual quality of discipline-specific terminology. Table 3 presents the vocabulary analysis by unit.

Table 3:

Scientific and Technical Vocabulary Analysis by Unit

Unit	Scientific / Technical Terms Found	Assessment
Unit 1	fashion, tradition, modern (general vocabulary only)	No scientific or technical vocabulary
Unit 2	AMF, AMU, OAU, UNICEF (organisation abbreviations)	Institutional abbreviations, not scientific terminology
Unit 3	biodiversity, conservation, deforestation, solar energy, recycling (p. 59, 64)	Environmental vocabulary present but at a general awareness level, not scientific discipline terminology
Unit 4	geometry, algebra, arithmetic, hypothesis, static electricity, molecule, electron, proton, conductor,	Strongest scientific vocabulary in the book; covers mathematics and physics;

Unit	Scientific / Technical Terms Found	Assessment
	insulator, astrolabe (pp. 79–96)	Arab scientists named with their discoveries
Unit 5	tsunami, earthquake (in reading text, p. 100)	Natural disaster vocabulary in a narrative context, not scientific analysis
Unit 6	flood, earthquake, disaster (p. 120)	Disaster vocabulary used for social/solidarity theme, not scientific study
Unit 7	science fiction, sci-fi, spaceship, outer space, flying saucer, optical illusion (p. 138)	Speculative and fictional science vocabulary; not genuine disciplinary terminology
Unit 8	turnover, invoice, dispatch, productivity, balance sheet (pp. 159–165)	Business and commercial vocabulary; not relevant to scientific stream
OVERALL	Scientific vocabulary concentrated in Unit 4 only;	NOT MET — vocabulary is predominantly general English;

Unit	Scientific / Technical Terms Found	Assessment
	scattered environmental terms in Unit 3	scientific terminology insufficient in depth and breadth

Source: Unit-by-unit analysis of Getting Through, Riche et al. (2006).

Table 3 reveals that scientific and technical vocabulary is heavily concentrated in Unit 4, which presents terms from mathematics (geometry, algebra, arithmetic), physics (static electricity, molecule, electron, proton, conductor, insulator) and the history of Arab science (astrolabe, Al-Kwarizmi, Al-Battani, Jabir, Alhazen). Unit 3 includes environmental vocabulary (biodiversity, deforestation, solar energy) at a general level. The remaining six units contain no scientific or technical vocabulary. There is no systematic development of scientific lexis across the book as a whole, no word-formation work specific to scientific fields, and no progression from introductory to advanced scientific terminology.

4.1.4 Criterion 3: Authenticity of Texts

The third criterion determines whether reading materials reflect real-world scientific language and are drawn from genuine scientific sources. Table 4 presents the text authenticity analysis.

Table 4:

Authenticity of Texts Analysis by Unit

Unit	Text / Source	Origin	Scientific Authenticity
Unit 1	'Uncle Hassan' narrative; fashion text	Fabricated by authors	None
Unit 2	Martin Luther King 'I Have a Dream' (pp. 48–49); Mariah Carey song (p. 53)	Authentic — literary/political speech and song	None — not scientific
Unit 3	Amazon rainforest text (p. 60); BBC Modern English (p. 74); Book of Popular Science (pp. 75–77)	Adapted from authentic sources	Partial — popular science, not academic/research text
Unit 4	Static electricity text (p. 89); Arab Science (pp. 95–96); Book of Popular Science	Adapted from Book of Popular Science; Harcourt Brace & World (p. 95)	Yes — adapted popular science; closest to genuine scientific text in the book

Unit	Text / Source	Origin	Scientific Authenticity
Unit 5	Tsunami text (p. 100); Grimm's Fairy Tales; Aesop's Fables	Authentic literary and news sources	None — literary and news texts
Unit 6	Boumerdes earthquake report (p. 129); Red Cross principles (pp. 134–135)	Adapted from internet and ISDR statement	None — social/humanitarian
Unit 7	Science fiction text (p. 139); UFO article (pp. 155–157)	Book of Popular Science vol. 9 (p. 156)	Marginal — popular science but speculative content
Unit 8	Business letters A-D (pp. 160–161); 'American Women at Work' (p. 170)	Fabricated/adapted for pedagogical purposes	None

Unit	Text / Source	Origin	Scientific Authenticity
OVERALL	No authentic scientific journal articles, research papers or lab reports anywhere in the book	Authors acknowledge mix of authentic and fabricated (p. 7)	NOT MET for scientific authenticity

Source: Unit-by-unit analysis of Getting Through, Riche et al. (2006). Authors acknowledge mixed approach on p. 7.

The analysis in Table 4 shows that while the textbook does include some authentic sources — notably the Book of Popular Science, BBC Modern English and a Newsweek article — none of these constitute genuine scientific academic texts. There are no journal articles, no research abstracts, no laboratory reports and no scientific data sets anywhere in the book. The most scientifically relevant texts are in Units 3 and 4, where popular science sources are used, but these are adapted and simplified for general comprehension rather than scientific literacy. Furthermore, all listening input is teacher-delivered from printed scripts, which means learners are never exposed to authentic spoken scientific English.

4.1.5 Criterion 4: Relevance to Learner Needs

The fourth criterion examines whether the textbook prepares students for the specific language demands of their scientific studies. Table 5 maps the documented needs of Algerian scientific stream students against what the textbook provides.

Table 5:

Learner Needs vs. Textbook Provision

Scientific Stream Need	Evidence in Textbook	Assessment
Reading scientific journals and research articles	No authentic scientific journal texts anywhere in the book. Reading texts are narrative, journalistic or literary.	NOT MET
Writing scientific reports, lab reports, research summaries	Unit 4 project for scientific stream students: 'Report on Scientific Experiments' (pp. 91–93). No model scientific report provided.	PARTIALLY MET — mentioned in project guidance only
Understanding scientific processes and describing experiments	Unit 4 static electricity text (p. 89) and geometry exercises (pp. 80–81) provide some exposure.	PARTIALLY MET — Unit 4 only
Interpreting data, graphs, and scientific tables	No data interpretation tasks anywhere in the book. Unit 8	NOT MET

Scientific Stream Need	Evidence in Textbook	Assessment
	has a business graph (p. 170) but not scientific data.	
Developing scientific presentation and discussion skills	Speaking activities are general: giving opinions, agreeing/disagreeing. No scientific presentation activities.	NOT MET
Preparing for university-level scientific English	Unit 4 includes a university open day listening dialogue (p. 86) but this is an isolated instance.	NOT MET overall

Source: Content analysis of Getting Through (Riche et al., 2006).

Table 5 reveals a systematic gap between what scientific stream students need and what the textbook provides. The textbook's Unit 4 project is the only point at which scientific stream learner needs are explicitly acknowledged, with the instruction to produce a 'Report on Scientific Experiments' (pp. 91–93). However, no model scientific report is provided, no guidance on scientific report structure is given, and no language scaffolding for scientific writing is offered. This single gesture toward scientific writing is insufficient to prepare learners for the demands of university-level scientific study.

4.1.6 Criterion 5: Academic Skills Development

The fifth criterion assesses whether the four language skills are developed for scientific and academic communication. Table 6 presents the analysis.

Table 6 :

Academic Skills Development in Getting Through

Skill	Task Types in Textbook	Assessment Against Scientific Academic Standard
Reading	Before/During/After reading framework; skimming, scanning, comprehension questions	General reading strategies only; no scientific reading genres (abstracts, methods sections, results sections). NOT MET for scientific reading.
Writing	Personal profiles, stories, conservation plans, surveys, letters, business portfolios, poems	No scientific writing genres at all: no lab reports, no process descriptions, no research summaries, no data commentary. NOT MET.
Listening	Teacher reads script aloud; no audio recordings. Genres : dialogues, interviews, narratives	No scientific listening genres (lectures, lab instructions, scientific presentations). Entirely teacher-delivered. NOT MET.

Skill	Task Types in Textbook	Assessment Against Scientific Academic Standard
Speaking	Agreeing/disagreeing, giving opinions, advice-giving, requesting, reporting	No scientific speaking tasks: no experiment descriptions, no scientific debate, no data presentation. NOT MET.

Source: Content analysis of Getting Through, Riche et al. (2006).

Table 6 shows that none of the four language skills is developed for scientific or academic communication. Reading tasks follow a general comprehension framework with no exposure to scientific text structures. Writing tasks are confined to personal, creative and communicative genres with no scientific writing at all. Listening is entirely teacher-delivered with no scientific listening genres. Speaking activities address general communicative functions with no scientific presentation or discussion tasks. This represents the most comprehensive ESP deficiency in the textbook.

4.1.7 Criterion 6: Learner-Centred Approach

The sixth criterion evaluates whether instruction considers students' scientific interests and allows active participation in learning. Table 7 presents the analysis.

Table 7:

Learner-Centred Features in Getting Through

Learner-Centred Feature	Evidence in Textbook	Assessment
Self-assessment tools	'Where Do We Stand Now?' checklist in all 8 units; 3-level scale (very well / fairly well / a little)	MET — consistent across all units
Portfolio-keeping	Student Introduction (p. 4) and Teacher Introduction (p. 7) both encourage portfolio use	MET — dual address to student and teacher
Student choice and autonomy in projects	Projects can be done individually or in groups (p. 4); Unit 4 differentiates by stream (pp. 91–93)	PARTIALLY MET — choice of working mode but limited choice of project topic
Content aligned to scientific interests	Only Unit 4 aligns content to students' scientific specialisation. Other 7 units do not differentiate by stream.	NOT MET — learner-centred design not applied to stream-specific content

Learner-Centred Feature	Evidence in Textbook	Assessment
Metacognitive strategy instruction	Tip Boxes throughout: listening strategies (Unit 3, p. 45), reading strategies (Unit 4, p. 90)	MET — metacognitive tools present

Source: Content analysis of Getting Through, Riche et al. (2006).

The learner-centred criterion is partially met. The textbook contains genuine learner autonomy tools — self-assessment checklists in all eight units, portfolio-keeping guidance in both the Student and Teacher Introductions (pp. 4–7), and metacognitive Tip Boxes throughout. These are commendable features of the book's general design. However, from an ESP perspective, the learner-centred approach is not extended to content selection. The seven units that do not relate to science do not consider the scientific stream student's specialisation, interests or future needs. Only Unit 4 acknowledges stream-specific learning by differentiating the project output (pp. 91–93).

4.1.8 Summary of Content Analysis Findings

Table 8 synthesises the findings of all six criteria.

Table 8:

Summary of Content Analysis Against Six ESP Criteria

Criterion	Overall Rating	Key Finding
1. Content Relevance	NOT MET	Only 1 of 8 units (Unit 4) is directly STEM-oriented. 5 units have no scientific relevance. 12.5% STEM coverage.
2. Scientific Vocabulary	NOT MET	Technical vocabulary concentrated in Unit 4. Largely general English vocabulary throughout. No systematic scientific lexical development.
3. Authenticity of Texts	NOT MET	No authentic scientific journal articles, lab reports or research papers. Popular science texts in Units 3-4 only. No scientific audio material.
4. Relevance to Learner Needs	NOT MET	No data interpretation, no scientific presentation, no research reading tasks. University preparation limited to one dialogue in Unit 4.
5. Academic Skills Development	NOT MET	No scientific writing genres, no scientific listening, no scientific speaking tasks. All four skills developed for general English only.

Criterion	Overall Rating	Key Finding
6. Learner-Centred Approach	PARTIALLY MET	Self-assessment and portfolio tools present in all units. Stream differentiation in Unit 4 project only. No learner-centred scientific content selection.

Rating definitions: MET = criterion fully satisfied across the textbook. PARTIALLY MET = criterion addressed in some units or partially. NOT MET = criterion absent or insufficient.

The content analysis reveals that *Getting Through* does not meet five of the six ESP criteria and only partially meets the sixth. The pattern is consistent: the textbook is a well-designed general English textbook that serves the needs of all secondary streams equally, but precisely because it targets all streams equally, it fails to serve the specific academic and linguistic needs of scientific stream students. The sole exception is Unit 4, which represents a genuinely science-oriented unit embedded in an otherwise general-purpose textbook.

4.1.9 Conclusion of Content Analysis

The systematic content analysis of *Getting Through* against six ESP evaluation criteria provides clear evidence that the textbook does not align with ESP principles for scientific stream instruction. Its topics are predominantly general, its scientific vocabulary is confined to one unit, its texts draw on no authentic scientific sources, its tasks do not develop scientific communication skills, and its learner-centred design does not extend to stream-

specific content. These findings provide the primary answer to the research questions and directly inform the evaluation of the three hypotheses in Chapter Five.

4.2 Section Two: Questionnaire Results

This section presents the results of the questionnaire administered to 31 secondary school English teachers in the wilaya of El Tarf. The questionnaire was designed to provide contextual support for the content analysis findings by capturing teachers' classroom observations and professional perceptions of Getting Through. The results are organised by the five questionnaire sections.

4.2.1 Section One: Professional background

Statement 1: Teaching experience

Figure 1 :

Teachers Teaching Experience with the Textbook Getting Through



The data presented in figure 1 indicates considerable variation in the professional experience of the participants. The largest group — 64.5% (n=20) — reported between five

and ten years of teaching experience. A further 19.4% (n=6) had fewer than five years of experience, while 16.1% (n=5) had more than ten years. This distribution confirms that the sample is composed primarily of teachers with substantial classroom experience, lending credibility to their evaluations of the textbook.

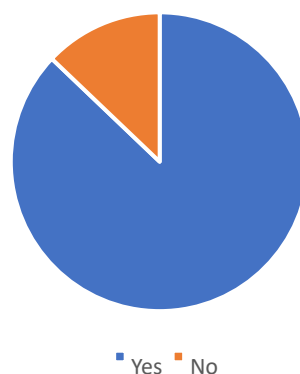
Question 2: Have you taught *Getting Through* (Secondary Education Year Two - Scientific Stream)?

Yes / No

Figure 2 :

Teachers Familiarity with the Textbook

Teachers' Familiarity with the Textbook *Getting Through*



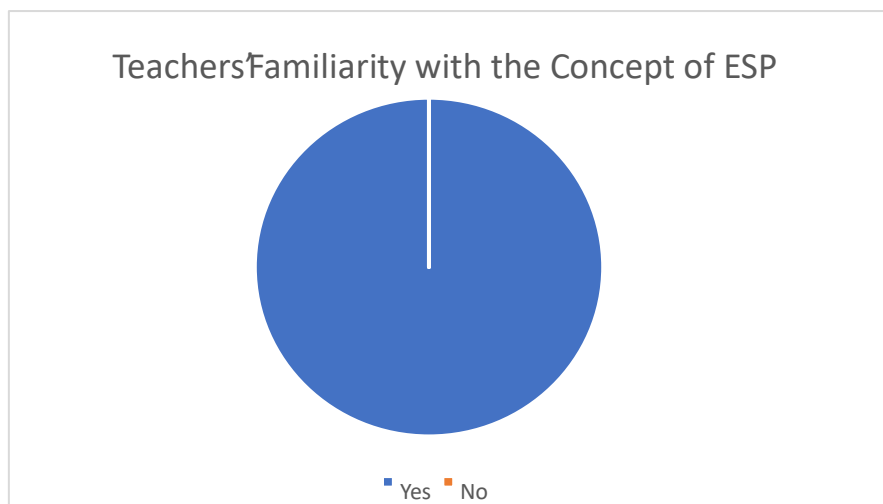
As shown in Figure 2, the overwhelming majority of respondents — 87.1% (n=27) — confirmed that they had taught *Getting Through* to Year 2 scientific stream students. Only 12.9% (n=4) had not used the textbook in this context. This result establishes that the vast majority of participants possess the direct experience necessary to offer informed assessments of the textbook's content and pedagogical suitability.

4.2.2 Section Two: ESP Awareness

Question one: Are you familiar with the concept of English for Specific Purposes?

Figure 3:

Teachers Familiarity with the Concept of ESP

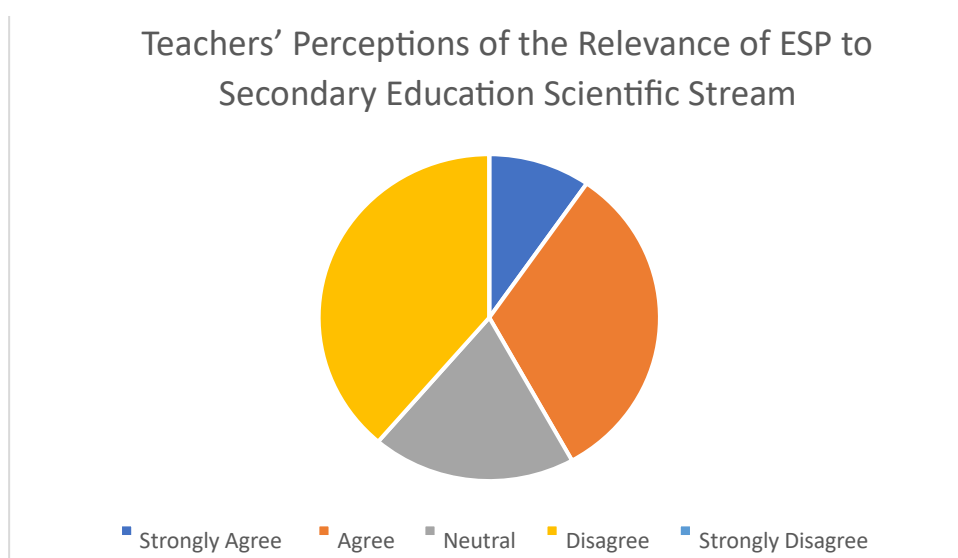


All 31 respondents (100%) indicated familiarity with the concept of English for Specific Purposes (ESP). This unanimous result suggests that the participating teachers possess at least a foundational understanding of ESP, making their subsequent evaluations of the textbook's ESP alignment pedagogically meaningful.

Statement Two: In your opinion, ESP is relevant to secondary education scientific streams.

Figure 3 :

Teachers Perception of the Relevance of ESP to Secondary Education Scientific Stream

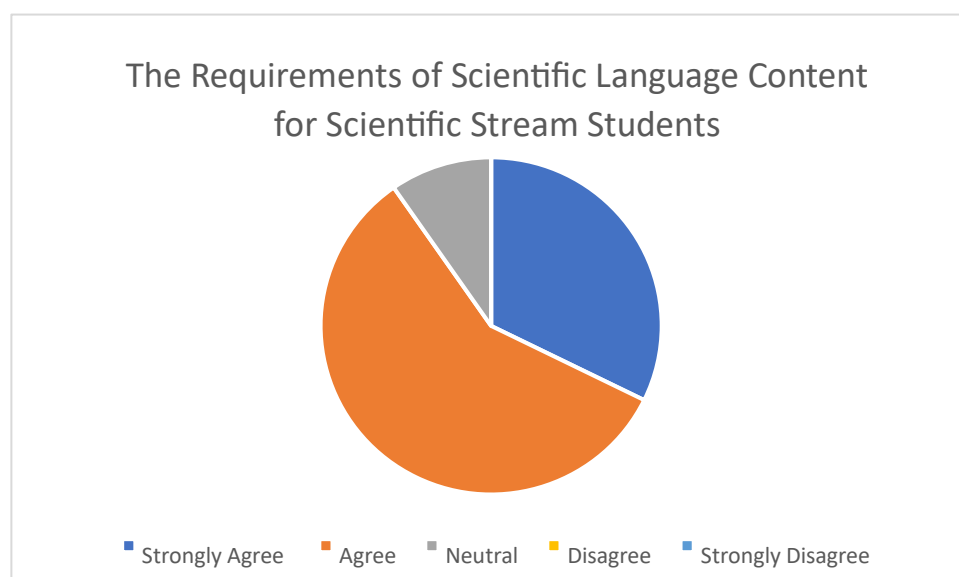


Responses to this statement revealed a notable diversity of opinion. The largest single group — 41.9% (n=13) — disagreed that ESP is relevant to secondary scientific stream instruction, while 32.3% (n=10) agreed and 9.7% (n=3) strongly agreed. An additional 19.4% (n=6) chose the neutral option, and no respondents selected "strongly disagree." The relatively high rate of disagreement may suggest that some teachers associate ESP primarily with higher education or professional contexts rather than secondary school instruction, which reflects a common misconception about the scope of ESP identified in the literature (Hutchinson & Waters, 1987).

Statement three: Teaching English to scientific stream students requires specific language content related to science.

Figure 4 :

The Requirements of Scientific Language Content for Scientific Stream Students



We observe from the figure above that regarding the necessity of specialized language content, most questionnaire participants had positive perceptions of including science-related English instruction. 58.1 % (18 teachers) agreed on the statement that stands on the necessity of providing specific language content and vocabulary to scientific streams students. Another proportion of teachers of 32.3% (10 teachers) “strongly agreed” with this notion.

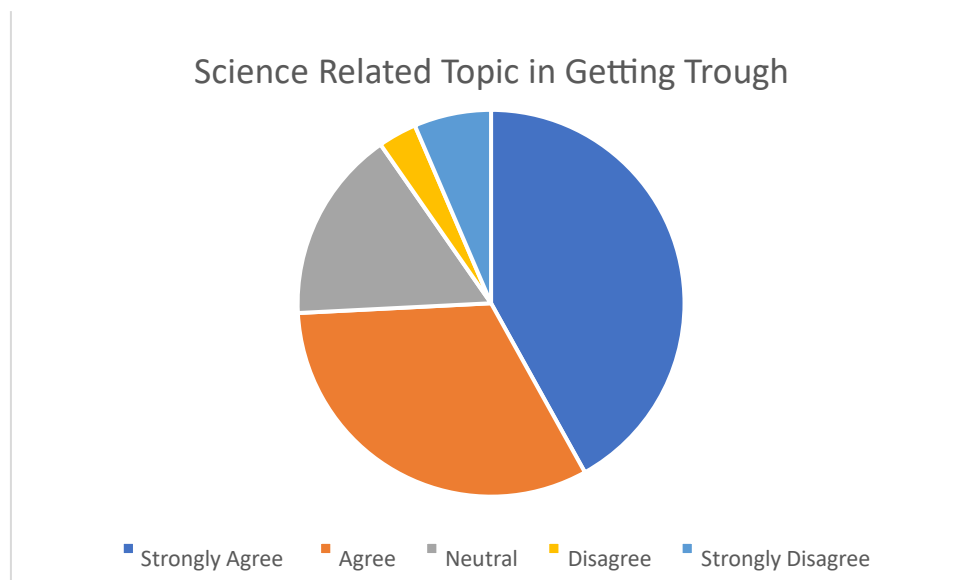
Whereas, only 9.7 % (3 teachers) selected the neutral option, while none of the teachers strongly or somewhat disagreed to the notion. The data reveals that large majority of teachers support the idea of adapting language content to the students' academic orientation.

4.2.3 Section Three: ESP Content in Getting Through

Statement 1: Conclusion textbook *Getting Through* includes topics related to science and technology.

Figure 5 :

Science Related Topic in Getting Through



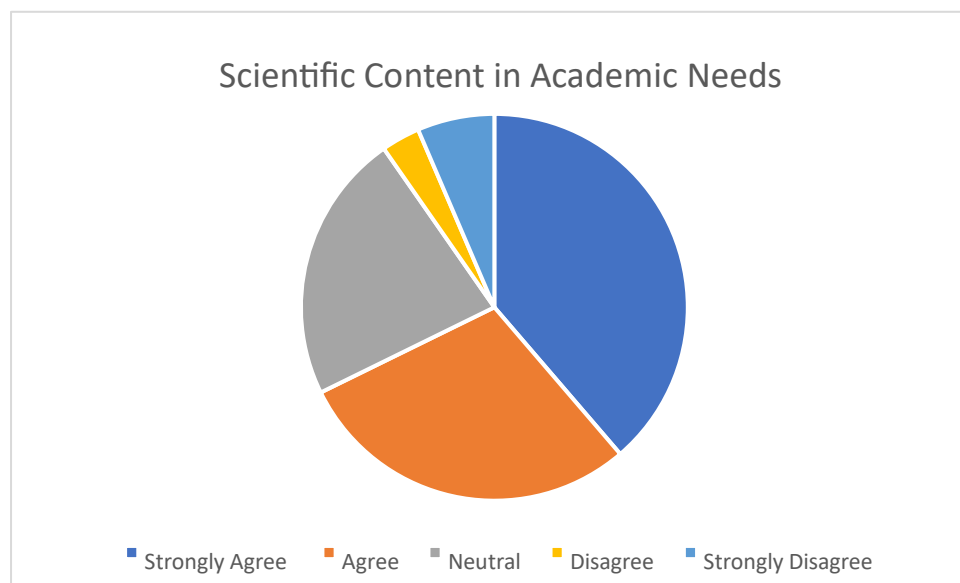
When asked whether *Getting Through* includes topics related to science and technology, a substantial majority of respondents expressed agreement: 41.9% (n=13) strongly agreed and 32.3% (n=10) agreed, producing a combined positive rating of 74.2%. A further 16.1% (n=5) were neutral. Only a small minority expressed reservations: 3.2% (n=1) disagreed and 6.5% (n=2) strongly disagreed, representing a combined disagreement rate of approximately 9.7%. These results indicate that most teachers perceive the textbook as containing science-oriented content. However, as the content analysis demonstrates, this perception requires careful interpretation — the teachers' broadly positive rating likely reflects

exposure to Unit 4 and selected environmental topics in Unit 3, rather than systematic scientific content across the textbook as a whole.

Statement 2: the scientific content presented in the textbook is relevant to students' academic needs.

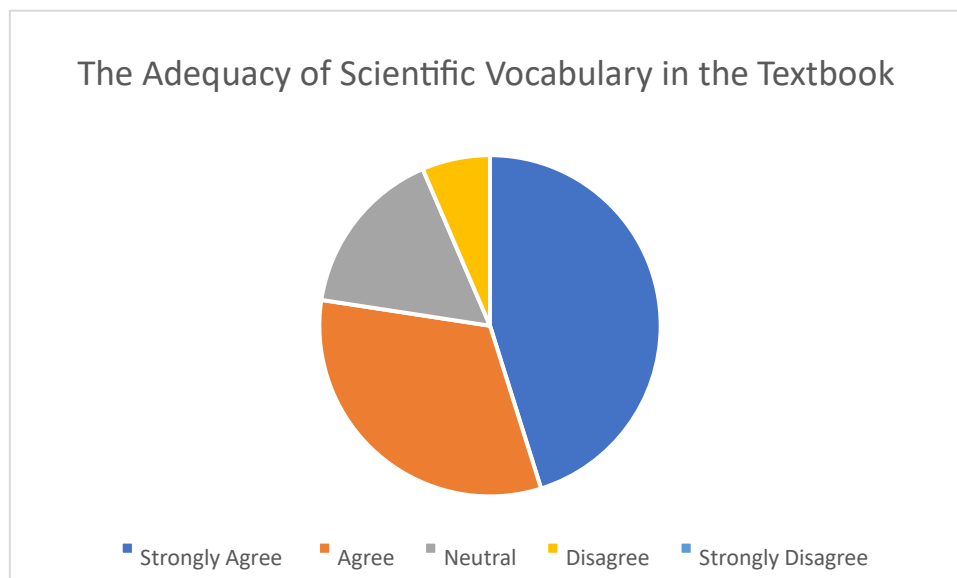
Figure 6 :

Scientific Content in Academic Needs



Responses to this statement were generally positive but with a notable degree of uncertainty. In total, 38.7% of respondents strongly agreed and 29.0% agreed that the scientific content in the textbook is relevant to students' academic needs — a combined agreement rate of 67.7%. However, 22.6% of respondents were neutral, expressing uncertainty about the relevance of the textbook's content. A smaller proportion indicated disagreement: 3.2% disagreed and 6.5% strongly disagreed, yielding a combined disagreement rate of 9.7%. The relatively high neutrality rate is significant and may reflect teachers' awareness of a gap between what the textbook offers and what students truly need — an awareness more explicitly articulated in the open-ended responses in Section 4.2.5.

Statement 3: The vocabulary used in the textbook reflects scientific and technical fields.

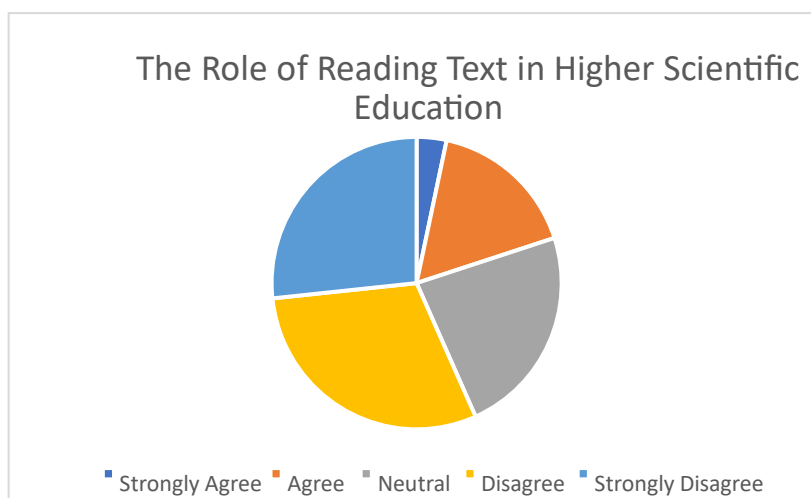
Figure 7 :*The Adequacy of Scientific Vocabulary in the Textbook*

The above figure displays that the majority of respondents gave a positive assessment of the textbook's scientific and technical vocabulary: 45.2% (n=14) strongly agreed and 32.3% (n=10) agreed that the vocabulary reflects scientific and technical fields, producing a combined agreement rate of 77.5%. A neutral response was given by 16.1% (n=5), while 6.5% of respondents disagreed. No respondents strongly disagreed. This strongly positive rating stands in notable contrast to the content analysis findings, which found meaningful scientific vocabulary only in Unit 4. This divergence is discussed further in Chapter 5.

Statement 4: The reading texts prepare students for scientific studies in higher education.

Figure 8 :

The Role of Reading Text in Higher Scientific Education



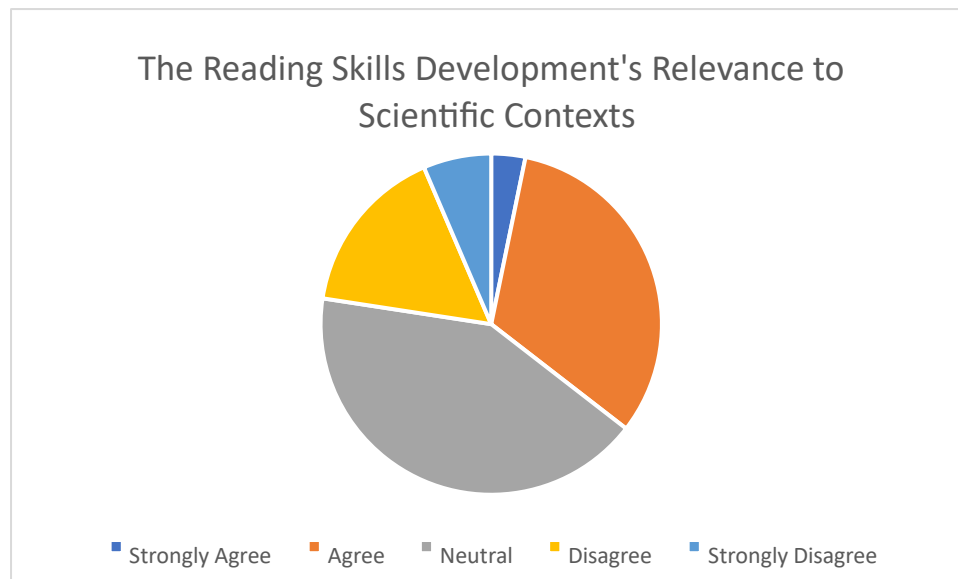
Responses to this statement were markedly more critical than those in the preceding items. A combined 54.8% of respondents expressed disagreement: 29.0% strongly disagreed and 25.8% disagreed that the reading texts prepare students for scientific study in higher education. An additional 22.6% were neutral. The remaining teachers expressed qualified agreement, with one respondent noting that *"the textbook could provide some scientific vocabulary but it will not be sufficient for higher education scientific knowledge."* This result represents the most critical collective judgment in the questionnaire and aligns most directly with the content analysis finding that the textbook contains no authentic scientific academic texts.

4.2.4 Section Four: Language skills and ESP Orientation.

Statement 1: The textbook develops reading skills relevant to scientific contexts.

Figure 9 :

The Reading Skills Development Relevance to Scientific Contexts

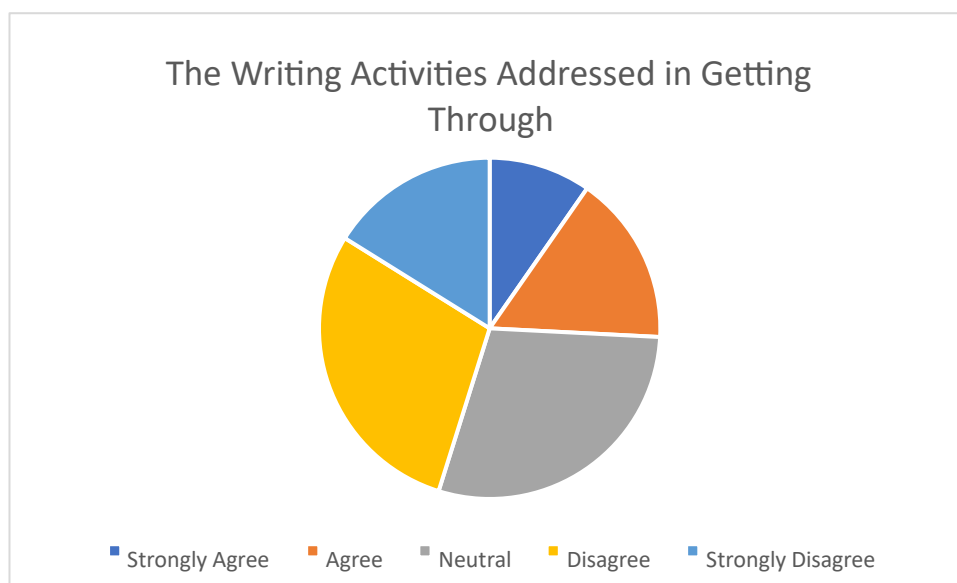


The Figure above shows the most evenly distributed pattern in the questionnaire. The largest group — 41.9% (n=13) — selected the neutral option, indicating uncertainty about whether the textbook develops reading skills relevant to scientific contexts. A combined 35.5% of respondents agreed (32.3% agreed; 3.2% strongly agreed) that reading skills are developed for scientific purposes. Conversely, 22.6% expressed disagreement (16.1% disagreed; 6.5% strongly disagreed). The high proportion of neutral responses may reflect teachers' recognition that the textbook does develop general reading strategies — skimming, scanning, comprehension — but that these are not applied to scientific text types, leaving the question of scientific relevance genuinely uncertain.

Statement 2: The writing tasks are related to scientific topics or academic purposes.

Figure 10 :

The Writing Activities Addressed in Getting Through

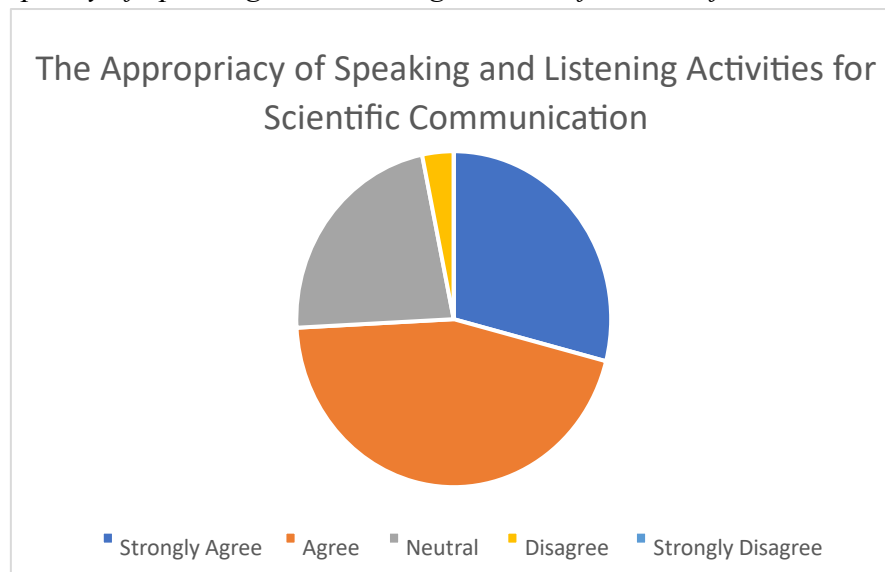


Teachers answers regarding writing activities were predominantly critical or uncertain. Both the neutral and disagreement categories received 29.0% of responses, while a further 16.1% strongly disagreed — producing a combined non-positive rating of 74.1%. Positive views were less frequent: 16.1% agreed and 9.7% strongly agreed that writing tasks are related to scientific topics or academic purposes (a combined positive rate of 25.8%). These results indicate that teachers are largely unconvinced of the writing activities' relevance to scientific communication — a finding that is fully consistent with the content analysis showing an absence of scientific writing genres throughout the textbook.

Statement 3: The speaking and listening activities are appropriate for scientific communication.

Figure 11 :

The Appropriacy of Speaking and Listening Activities for Scientific Communication



As illustrated in Figure 12, responses regarding the appropriacy of speaking and listening activities for scientific communication were largely positive. The largest group of respondents — 45.2% (n=14) — agreed with the statement, while 29.0% (n=9) strongly agreed, producing a combined positive rating of 74.2% (n=23). A notable proportion of 22.6% (n=7) selected the neutral option, neither confirming nor denying the appropriacy of these activities for scientific communication purposes. Only 3.2% (n=1) disagreed with the statement, and no respondents expressed strong disagreement. Overall, these results indicate that teachers generally regard speaking and listening activities as suitable for scientific communication. However, the relatively high neutrality rate suggests that a portion of respondents remain uncertain about whether the textbook's speaking and listening activities are adequately oriented toward scientific contexts specifically, as opposed to general communicative purposes.

4.2.5 Section Five: Teachers' Evaluation and Suggestions

Unlike the preceding sections, which employed Likert-scale statements to capture measurable trends in teacher perceptions, this final section consisted of two open-ended questions. These invited respondents to evaluate the extent to which *Getting Through* meets ESP principles and to propose specific improvements to its content. Open-ended responses

were analysed thematically, with recurring ideas grouped into patterns. The qualitative nature of this data provides a depth of practitioner insight that complements and enriches the quantitative findings presented above.

A. In your opinion, does *Getting Through* meet the principles of ESP? Why or why not?

Teachers' open-ended responses to this question revealed a predominantly critical evaluation of the textbook's alignment with ESP principles. Several respondents acknowledged that the textbook partially satisfies ESP requirements insofar as it contains some science-related themes and terminology. However, a recurring concern was that the book is designed for all secondary streams simultaneously, making it impossible for it to fully address the specialised linguistic needs of scientific stream students.

The majority of respondents indicated that the textbook's content is too general in nature and does not adequately prepare students for post-secondary scientific study. Teachers consistently identified the need for greater emphasis on technical vocabulary and discipline-specific content. Representative responses included:

"No, it does not. The same topics of second year are taught to all streams, aiming to improve learners' four skills in general."

"Getting Through does not fully respect ESP requirements because it teaches General English, not English for specific needs."

"To some extent, because not all the units fit the experimental language that science students need."

"It is not updated yet."

"More or less, not all the unit topics meet the principles of ESP since many learners, especially average and weaker students, do not progress adequately, which can lead to disengagement and negative attitudes toward the English language."

These responses reflect a practitioner-level awareness of the textbook's limitations that closely mirrors the content analysis findings.

B. What ESP-related elements should be added or improved in the textbook?

Teachers' recommendations for improving the textbook fell into three broad categories. First, regarding content, respondents called for an increase in scientific and technical material across units, including subject-specific terminology from fields such as biology, chemistry, and physics. Second, regarding skills development, teachers highlighted the need for activities that build writing and speaking competence in authentic academic and scientific contexts. Third, regarding curriculum design more broadly, several respondents argued that scientific stream textbooks should be entirely separate from general stream materials, with a syllabus built around the students' actual academic needs and future career requirements.

Selected teacher recommendations included:

"More authentic tasks and technical vocabulary."

"Scientific stream textbooks should be separated, and the syllabus should include only scientific texts and terms."

"The textbook should include specialised vocabulary, real-life situations, and practical activities based on students' needs and future careers."

"Designing content that is related to learners' needs as far as scientific studies are concerned."

Conclusion of Questionnaire Findings

The questionnaire data provides contextual support for the content analysis findings. Teachers' open-ended responses converge clearly with the content analysis: the textbook does not meet ESP principles and falls short of scientific stream students' academic needs. Where questionnaire ratings diverge from the content analysis — most notably in the positive ratings for scientific vocabulary and topics — this divergence can be explained by the familiarity effect and by teachers' broad interpretation of what constitutes scientific content. The analysis of this divergence is taken up in Chapter Five.

CHAPTER FIVE

Discussion

Introduction

This chapter discusses and interprets the findings presented in Chapter Four. While Chapter Four described what the content analysis and questionnaire data show, this chapter explains what the findings mean in relation to the research questions and hypotheses, and what they imply for teaching practice and curriculum design. The discussion draws primarily on the content analysis as the central source of evidence, using the questionnaire findings as contextual support throughout.

5.1 The Content Analysis: What the Evidence Shows

The content analysis provides the clearest and most direct answer to the research questions. Analysed against the six ESP evaluation criteria established in Chapter Three, *Getting Through* emerges as a general English textbook that does not meet the specific linguistic and academic needs of scientific stream students. Five of the six criteria were not met; the sixth — learner-centred approach — was only partially met.

The most fundamental finding is structural. The textbook was designed for all secondary streams simultaneously, which means it was never intended to provide English for Specific Purposes instruction for scientific stream students. This is not a failure of the authors' expertise — it is a consequence of a national curriculum decision to use a single general-purpose coursebook across all streams at this level. The result is that scientific stream students spend seven out of eight units studying content that has no direct relevance to their academic specialisation.

Unit 4 — Budding Scientist — represents the exception. It is the only unit that directly addresses scientific content through geometry, physics vocabulary, the history of Arab science, and a university open day scenario. It also differentiates the project task by stream, offering scientific stream students a report on scientific experiments while literary stream students produce an ABC of Dreams (pp. 91–93). However, a single science-oriented unit embedded in seven general English units does not constitute an ESP programme. As Hutchinson and Waters (1987) established, ESP is defined by its commitment to the learner's specific needs across the full course of instruction — not by the isolated presence of scientific themes in one unit.

5.2 Connecting the Content Analysis to the Questionnaire

The questionnaire findings are most valuable where they reinforce the content analysis, and most informative where they diverge from it. Table 9 presents this comparison across all six criteria.

Table 9 :

Content Analysis and Questionnaire — Areas of Agreement and Divergence

ESP Criterion	Content Analysis	Questionnaire	Relationship
1. Content Relevance	NOT MET: only Unit 4 is directly STEM-oriented; 5 of 8 units have no	54.8% disagreed that reading texts prepare students for higher	CONVERGENCE: both instruments confirm insufficient scientific content

ESP Criterion	Content Analysis	Questionnaire	Relationship
	scientific relevance	scientific education	
2. Scientific Vocabulary	NOT MET: scientific vocabulary concentrated in Unit 4 only; absent from six units	77.5% agreed vocabulary reflects scientific and technical fields	DIVERGENCE: teachers rate vocabulary more positively than the content warrants — familiarity effect
3. Authenticity of Texts	NOT MET: no authentic scientific journal articles, research papers or lab reports anywhere	54.8% disagreed that reading texts are adequate for scientific preparation	CONVERGENCE: both confirm reading texts are insufficient
4. Relevance to Learner Needs	NOT MET: no data interpretation, no scientific presentation tasks,	Open responses: 'Getting Through teaches general English, not	CONVERGENCE: strongest alignment between both instruments

ESP Criterion	Content Analysis	Questionnaire	Relationship
	no university-level preparation	English for specific needs'	
5. Academic Skills Development	NOT MET: all four skills developed for general English only; no scientific writing, listening or speaking genres	Writing: 45.1% neutral or negative. Reading: 54.8% negative	CONVERGENCE: both confirm skills not developed for scientific communication
6. Learner-Centred Approach	PARTIALLY MET: self-assessment tools present in all units; stream differentiation in Unit 4 project only	Open responses indicate need for 'needs-based scientific content'	PARTIAL CONVERGENCE

Sources: Content analysis of Getting Through (Riche et al., 2006); Teacher questionnaire (n = 31, El Tarf wilaya).

As Table 9 shows, convergence between the two instruments is strongest where the evidence is most concrete: reading texts, overall ESP alignment, academic skills development, and relevance to learner needs. Teachers' open-ended responses — which require articulation rather than the selection of a scale option — align most closely with the content analysis findings. Responses such as 'Getting Through teaches general English, not English for specific needs' and 'not all units fit the experimental language that science students need' confirm the content analysis conclusion independently.

The most notable divergence concerns scientific vocabulary, where 77.5% of teachers gave a positive rating despite the content analysis showing that scientific vocabulary is confined to Unit 4 and partially Unit 3. This divergence is explained by two factors. First, teachers who have used the book over several years develop familiarity with it that can inflate their perceptions of its content. Second, teachers appear to interpret any subject-related vocabulary — environmental terms in Unit 3, business terms in Unit 8, social vocabulary in Unit 2 — as scientific content, even when these terms belong to general English rather than to the STEM disciplines students are studying.

5.3 Discussion of the Research Questions

The main research question asked: to what extent does *Getting Through* meet the principles of English for Specific Purposes for second-year scientific stream students?

The answer provided by the content analysis is clear: to a very limited extent. The textbook meets ESP principles only in Unit 4 and partially in Unit 3. Across the remaining six units, there is no alignment with ESP principles. The textbook does not reflect a needs analysis conducted for scientific stream students; it does not use authentic scientific sources;

it does not develop scientific communication skills; and it does not provide vocabulary specific to the scientific disciplines those students are pursuing.

5.3.1 Research Question One

The first sub-question asked: To what extent do the topics and themes presented in the textbook correspond to the academic and scientific needs of scientific stream students?

The content analysis reveals that only one unit — Unit 4 (Budding Scientist) — is directly oriented toward science and technology. Two further units (Unit 3 and Unit 7) offer marginal or partial scientific relevance, while the remaining five units are entirely unrelated to the scientific stream's academic needs. This means that 62.5% of the textbook's content is devoted to general, socio-cultural, literary, and occupational themes that bear no connection to the disciplines scientific stream students are pursuing. The textbook was clearly designed as a general English resource for all secondary streams simultaneously, and this structural decision is the root cause of its failure to meet scientific stream learners' content needs.

The questionnaire reinforces this finding. While a majority of teachers rated the textbook positively for containing science-related topics, the most critically-rated item in the entire questionnaire — where 54.8% of teachers disagreed that reading texts prepare students for higher scientific education — directly contradicts that surface-level approval. Teachers' open-ended responses are even more explicit: *"the same topics of second year are taught to all streams"* and *"not all the units fit the experimental language that science students need."* These responses confirm that practitioners are aware of the topical mismatch, even when Likert-scale ratings do not fully capture it.

5.3.2 Research Question Two

The second sub-question asked: How adequately does the textbook incorporate vocabulary and language features relevant to scientific disciplines?

The content analysis shows that scientific and technical vocabulary exists meaningfully in only one unit (Unit 4) and partially in one other (Unit 3). Unit 4 introduces terminology from mathematics (geometry, algebra, arithmetic), physics (molecule, electron, proton, conductor, insulator, static electricity) and the history of Arab science (astrolabe). Unit 3 includes environmental vocabulary (biodiversity, deforestation, solar energy) at a general awareness level. The remaining six units contain no scientific or technical vocabulary. Crucially, there is no systematic development of scientific lexis across the textbook as a whole — no word-formation work specific to scientific fields, no progression from introductory to advanced terminology, and no vocabulary tasks designed to prepare students for reading scientific literature or writing academic reports.

The questionnaire data presents a divergence here: 77.5% of teachers gave a positive rating for the textbook's scientific vocabulary. However, as discussed in Section 5.2, this divergence is explained by the familiarity effect and by teachers' tendency to interpret any subject-related vocabulary — including environmental, social, and business terms — as scientific content. Teachers' own open-ended responses call for "*more scientific and technical concepts*" from fields such as biology, chemistry, and physics, which themselves confirm that what the textbook currently provides is insufficient.

5.3.3 Research Question Three

The third sub-question asked: How effectively do the tasks and activities support the development of language skills required in scientific and academic contexts?

The content analysis demonstrates that none of the four language skills is developed for scientific or academic communication anywhere in the textbook. Reading tasks follow a general comprehension framework — built around Before, During, and After reading activities — with no exposure to scientific text structures such as abstracts, methods sections, results sections, or data commentary. Writing tasks are confined to personal, creative, and communicative genres — profiles, stories, letters, surveys, and poems — with no scientific writing genres present in any unit. Listening is entirely teacher-delivered from printed scripts, with no scientific lectures, laboratory instructions, or research presentations at any point. Speaking activities address general communicative functions — agreeing, disagreeing, giving opinions, and requesting — with no scientific presentation or discussion tasks anywhere in the book. This represents the most comprehensive ESP deficiency identified in the content analysis: all four language skills are systematically developed for general English proficiency rather than scientific communication.

The questionnaire data supports this conclusion. Writing tasks received the most critical ratings of any language skill item, with a combined 74.1% of respondents either neutral, disagreeing, or strongly disagreeing that writing tasks are related to scientific topics or academic purposes. Reading skill development also received a predominantly neutral or negative response, with 54.8% of teachers rating the reading texts as inadequate for scientific preparation. Teachers' open-ended recommendations consistently called for activities that

build writing and speaking competence in authentic academic and scientific contexts, further confirming that the current task design does not meet the needs of scientific stream learners.

5.4 Evaluation of the Hypotheses

Table 10 evaluates the three research hypotheses against the combined evidence of the content analysis and the questionnaire.

Table 10 :

Evaluation of Hypotheses Against Combined Evidence

Hypothesis	Verdict	Evidence from Both Instruments
H1: Topics and themes largely emphasise General English rather than discipline-specific scientific English, limiting their relevance to students' academic needs.	CONFIRMED	Content analysis: 5 of 8 units have no STEM relevance; only Unit 4 is directly science-oriented. Questionnaire: 54.8% disagreed that reading texts prepare for higher scientific education. Open responses: 'the same topics are taught to all streams.'
H2: The textbook insufficiently incorporates the specialised vocabulary and linguistic structures	CONFIRMED	Content analysis: scientific vocabulary limited to Unit 4 and partially Unit 3; absent from six units; no systematic scientific lexical development. Questionnaire open responses: teachers

Hypothesis	Verdict	Evidence from Both Instruments
required for scientific disciplines.		called for biology, chemistry and physics terminology.
H3: The tasks and activities do not effectively prepare students for academic and scientific communication within their future fields of study.	CONFIRMED	Content analysis: no scientific writing genres, no scientific listening tasks, no data interpretation tasks anywhere in the book. Questionnaire: writing and reading tasks received the most critical ratings; 45.1% neutral or negative on writing tasks.

Sources: Content analysis of Getting Through (Riche et al., 2006); Teacher questionnaire data (n = 31, El Tarf wilaya).

As Table 10 shows, all three hypotheses are confirmed by the combined evidence. The pattern is consistent across both instruments and across all six evaluation criteria. Getting Through is a well-designed general English textbook that contains isolated ESP features — most notably in Unit 4 — but does not constitute an ESP programme for scientific stream students.

5.5 Implications of the Study

The findings imply that the incorporation of ESP principles in secondary schools' English textbooks are still inadequate to serve the growing demand for specialized scientific

linguistics and academics. In other words, it simply remains limited despite its importance. The results indicate that though the textbook includes some of the scientific themes and terminology related to science, it doesn't include enough of the elements required to be sufficiently considered an ESP- oriented textbook, it rather provides emphasis on general English that it does on a certain subject or to say solely scientific field. Moreover, the study shows that there's a major need for a more learner-centered curriculum regarding the scientific stream students; meaning; an ESP designed textbook solely made for that stream. The literature of ESP indicates that instructional materials should be available or designed devotedly to incorporate scientific content, specific terminology, and field related communication activities. The research indicates its strong belief in scientific students' benefits from learning material that ought to better prepare them for higher education learning, by exposing them to a hint of what's coming from language skills.

5.6 Limitations of the Study

While carrying out this research study, we faced a number of limitations that should be noted. Initially, the teachers in high schools weren't that cooperative some were busy and the others answered half of the questionnaire and left most of the questions empty. it is expected; almost more than half of the teacher participants did not respond to the survey though it both in real life and online, so they were not restricted by time. Moreover, some of respondents didn't answer some of the needed questions leaving them blank (few of the open-ended questions). It was noticed that the majority of teachers couldn't make up their minds regarded some questions selecting the neutrality option. From a point, they expressed a neutral view towards the statement of writing tasks relation to scientific topics or academic purposes. Conversely, they agreed on the scientific theme inclusion to the paragraphs of secondary schools' topics where it doesn't collide. Consequently, it was difficult to end up with a clear conclusion without any misunderstanding, the neutral responses were producing findings

which are inconclusive. The questionnaire also took places in different high schools in a lot districts in El Tarf (Ain assal, El kala, Drean, Bouhadjar, boutheldja...), where we had to travel just to find enough participants so we can collect enough data. Teachers are overwhelmed with workloads, exams, supervision and doing their own research, all of that result in not having time to answer the questionnaire

5.7 Recommendations for the Research Findings

On the basis of the study results, a set of recommendations can be proposed to ESP teachers and learners:

- The integration of ESP principles into English textbooks should be more explicit for scientific stream students.
- Textbook scholars should integrate a broader scope of scientific and technological themes that are more related to their field of study.
- More emphasis should be placed on technical and scientific terminology in an aspect in which utilizes contextualized input.
- Reading texts should be considerably selected from scientific contexts to familiarize and expose the students with academic discourse for them to learn the types and styles of different topics writing.
- Writing tasks should highlight academic and scientific genres such as articles, reports, researches and processes of the study.
- listening and speaking activities should replicate real scientific communicative situations.
- curriculum should be updated within the scientific needs analysis to determine the linguistic and academic needs of the student.

➤ teachers should be encouraged to use ESP principles and practically implement it on learners.

5.8 Suggestions for Further Studies

Since new technologies and fields are coming up and English is a globalized language, the need for ESP rises daily. Further research should be carried out to delve deep in this area. Hence, we suggest the following :

- An experimental study is recommended to create a paradigm that conducts ESP based content analysis of the textbook to which its themes, terminology, language and concepts correspond to the ESP principles.
- Replicating the same research in more high schools and adding the students points of views about the ESP relevance and comparing their opinions with teachers' responses.
- Investigating the relation between the secondary school content of English in scientific streams with university students within the same field.
- Conducting various comparisons of the textbook “getting through” and general English as a second language learner to determine the similarities.

Conclusion

This study investigated the extent to which Getting Through, the official English textbook for second-year scientific stream students in Algeria, aligns with the principles of English for Specific Purposes. Using a descriptive-analytical design, the study combined a systematic content analysis of the textbook with a supplementary questionnaire administered to 31 secondary school English teachers in the wilaya of El Tarf.

The findings confirm all three hypotheses and lead to a clear answer to the main research question: *Getting Through* does not meet ESP principles for scientific stream instruction. Its topics are predominantly general, its scientific vocabulary is confined to one unit, its texts draw on no authentic scientific sources, and its tasks develop none of the four language skills for scientific or academic communication. The learner-centred tools the book contains — self-assessment checklists and portfolio guidance — are commendable features of its general design, but they do not address the stream-specific needs of scientific students. Unit 4 alone provides genuinely science-oriented content, but a single unit cannot constitute an ESP programme.

Teachers' questionnaire responses, particularly their open-ended feedback, support this conclusion. The majority stated clearly that the textbook teaches general English and does not adequately prepare scientific stream students for higher education. The most critical rating — where 54.8% of teachers disagreed that reading texts prepare students for scientific study — is the clearest practitioner confirmation of the content analysis finding.

The main recommendation arising from this study is the development of a dedicated ESP textbook for scientific stream students that incorporates authentic scientific texts, discipline-specific vocabulary, and tasks modelled on real scientific communication. Until such a textbook is available, teachers are encouraged to supplement *Getting Through* systematically in the areas of greatest deficiency: reading, writing and listening. Future research should replicate this study across other Algerian wilayas, incorporate student perspectives, and investigate the continuity between secondary school English and the language demands of university scientific study.

This study is limited to one textbook, one wilaya and teacher perspectives only. These limitations notwithstanding, it offers a systematic and evidence-based contribution to the evaluation of EFL materials in the Algerian secondary context, and opens a path for further research into ESP curriculum design at this level.

References

- Abdallah, M. M. S. (2025). Realistic needs matter: The imperative of learner-centred design in EFL curriculum development. *Faculty of Education, Assiut University*.
<https://eric.ed.gov/?id=ED672712>
- Anthony, L. (2007). The teacher as student in ESP course design. *2007 International Symposium on ESP, 1*.
https://laurenceanthony.net/research/20071005_06_fooyin_keynote/20071005_06_fooyin_keynote_proc.pdf
- Assassi, T. (2021). The status of ESP in Algeria: The need for highly specialized courses of English. *Humanization Journal for Researches and Studies, 11*(20), 439–455.
<https://asjp.cerist.dz/en/article/144155>
- Bankole, M. A., Ayoola, M. O., & Adegite, A. (2023). Enhancing communicative competence through English for Specific Purposes (ESP): A comparative study of ESP and general English approaches in university language programme. *European Journal of Theoretical and Applied Sciences, 1*(6), 293–300. [https://doi.org/10.59324/ejtas.2023.1\(6\).29](https://doi.org/10.59324/ejtas.2023.1(6).29)
- Behira, Y. (2024). ESP vs. EGP in Algerian secondary education: Promoting specialty language continuum in academia. *Journal of Faslo el-khitab, 13*(2), 461–474.
<https://asjp.cerist.dz/en/article/254630>
- Bhatia, V., Anthony, L., & Noguchi, J. (2011). ESP in the 21st century: ESP theory and application today. *Proceedings of the JACET 50th Commemorative International Convention*.

Blagojević, S. (2013). Original texts as authentic ESP teaching material: The case of philosophy.

Facta Universitatis, Series: Linguistics and Literature, 11(2), 113–126.
https://www.esptodayjournal.org/pdf/vol_1_1/7.%20SAVKA%20BLAGOJEVIC-%20full%20text.pdf

Bonabi, V. F. (2008). The importance of materials design in ESP and EST. *Journal of Applied Linguistics*, 1(3), 39–61.

Bortnyk, S. (2021). Key issues of English for Special Purposes (ESP) competence in adult education and career development. *Analele Universității Dunărea de Jos Galați*, 16(1), 175–183. <https://doi.org/10.35219/annugal.2021.16.1.12>

Boudersa, N. (2018). ESP education in Algeria: A description of the teaching situation scenario with focus on problems, challenges and training. *International Arab Journal of English for Specific Purposes*, 1(2), 2–20.

Boudjemaa, K., & Labed, N. (2021). Writing scientific articles in English: Algerian science students' needs, problems and solutions. *Anthropology Journal*, 2(7), 333.
<https://www.asjp.cerist.dz/en/article/170505>

Bouguenous, A. (2017). *Towards teaching ESP in Algeria: Difficulties in writing on scientific topics and appropriate solutions (Secondary School of Ain Merane-Chlef as a case study)*. Centre Universitaire Ahmed Zabana de Relizane.

Carbajosa Palmero, N. (2003). The ESP teacher as a materials designer: A practical example. *Estudios de lingüística inglesa aplicada (ELIA)*, 4, 189–200.

Cigan, V., & Kordić, L. (2013). *The role of ESP courses in general English proficiency*. University

College Effectus.

Crystal, D. (2003). *English as a global language* (2nd ed.). Cambridge University Press.

<https://doi.org/10.1017/CBO9780511486999>

Diaz-Santos, G. (2000). Technothrillers and English for science and technology. *English for Specific*

Purposes, 19(3), 221–236. [https://doi.org/10.1016/S0889-4906\(98\)00020-9](https://doi.org/10.1016/S0889-4906(98)00020-9)

Dudley-Evans, T. (1998). An overview of ESP in the 1990s. In *The Japan Conference on English for*

Specific Purposes Proceedings, Fukushima, Japan.

Dudley-Evans, T., & St. John, M. J. (1998). *Developments in English for specific purposes: A multidisciplinary approach*. Cambridge University Press.

Elmechta, L. (2020). The language of research: Investigating the place of English in Algerian scientific research: The case of University Frères Mentouri, Constantine-Algeria.

Revue des

Sciences Humaines – Université Mohamed Khider Biskra, 6(1), 535–545.

<https://asjp.cerist.dz/en/article/119402>

Flowerdew, L. (2025). Needs analysis and curriculum development in ESP. In S. Starfield & C. A. Hafner (Eds.), *The handbook of English for specific purposes* (2nd ed.). John

Wiley & Sons. <https://doi.org/10.1002/9781119985068.ch17>

Ghounane, N. (2022). English as the language of scientific research in Algeria. *Social Science*

Development, 15(2), 204–215. <https://asjp.cerist.dz/en/downArticle/310/15/2/215895>

Gouabi, K. (2023). ESP and Business English for postgraduate students in the Department of Economics, Tahri Mohamed University, Bechar, Algeria. *Arab World English Journal*, 14(1),

476–485. <https://doi.org/10.24093/awej/vol14no1.30>

Hanifi, A. (2021). Students' attitudes to secondary school reading texts of ESP aspects. *Journal of*

Languages and Translation, 1(1), 23. <https://journals.univ-chlef.dz/index.php/jlt/>

Háhn, J., & Podlášková, I. (2016). Videoconferencing in ESP classes: Learner-centred approach.

CASALC Review, 5(2), 51–61. <https://journals.muni.cz/casalc-review/article/view/20544>

Hinkel, E. (Ed.). (2011). *Handbook of research in second language teaching and learning* (Vol. II).

Routledge. <https://doi.org/10.4324/9780203836507>

Hossain, M. J. (2013). ESP needs analysis for engineering students: A learner centered approach.

Journal of PU, Part: B, 2(2), 16–26. <http://presidency.edu.bd/uploads/article003.pdf>

Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centred approach*.

Cambridge University Press. <https://doi.org/10.1017/CBO9780511733031>

Hyland, K. (2022). English for Specific Purposes: What is it and where is it taking us? *ESP Today*,

10(2), 202–220. <https://doi.org/10.18485/esptoday.2022.10.2.1>

Hyland, K., & Jiang, F. (2021). Delivering relevance: The emergence of ESP as a discipline.

English for Specific Purposes, 64, 13–25. <https://doi.org/10.1016/j.esp.2021.06.002>

Islam, D. M. (2023). The differences and similarities between English for Specific Purposes (ESP) and English for General Purposes (EGP) teachers. *Journal of Research in Humanities*, 51(1),

1–11. <https://jrh.pu.edu.pk/index.php/Journal/article/view/176>

- Karimnia, A., & Jafari, F. M. (2017). Critical ESP textbook evaluation: The case of visual arts textbook. *Sustainable Multilingualism*, 11(1), 219–236. <https://doi.org/10.1515/sm-2017-0020>
- Kočović Pajević, M. M. (2025). Exploring the role of authentic materials in ESP textbooks for tertiary education. *Methodical Perspectives*, 16(1), 205–224. <https://doi.org/10.19090/MV.2025.16.1.205-224>
- Lesiak-Bielawska, E. D. (2015). Key aspects of ESP materials selection and design. *English for Specific Purposes World*, 46. http://www.esp-world.info/Articles_46/Lesiak-Bielawska.pdf
- Liao, H.-C., & Chen, Y.-H. (2012). English-for-Science-and-Technology teaching materials: Phase one evaluation. *English Language Teaching*, 5(6), 89–103. <https://doi.org/10.5539/elt.v5n6p89>
- Medrea, N., & Rus, D. (2012). Challenges in teaching ESP: Teaching resources and students' needs. *Procedia Economics and Finance*, 3, 1165–1169. [https://doi.org/10.1016/S2212-5671\(12\)00291-2](https://doi.org/10.1016/S2212-5671(12)00291-2)
- Messerehi, M. (2014). The teaching of English culture in Algerian secondary schools: The case of second year classes. *Arab World English Journal*, 5(1), 167–179. <https://awej.org/theteaching-of-english-culture-in-algerian-secondary-schools-the-case-of-second-year-classes/>
- Mirkomilova, M. J., & Azimova, M. J. (2026). What is ESP? Basic conceptions, principles, types of

ESP. *Yangi O'zbekiston Talabalari Axborotnomasi*, 4(1).

<https://doi.org/10.5281/zenodo.18206059>

Paltridge, B., & Starfield, S. (Eds.). (2013). *The handbook of English for specific purposes*. Wiley-

Blackwell. <https://doi.org/10.1002/9781118339855>

Pašalić, M., & Plančić, B. (2018). Issues affecting selection and evaluation of ESP teaching materials. *Transactions on Maritime Science*, 7(2), 210–218.

<https://doi.org/10.7225/toms.v07.n02.011>

Poedjiastutie, D., & Oliver, R. (2017). English learning needs of ESP learners: Exploring stakeholder perceptions at an Indonesian university. *TEFLIN Journal*, 28(1), 1–21.

<https://doi.org/10.15639/teflinjournal.v28i1/1-21>

Ramos, R. C. G. (2008). ESP in Brazil: History, new trends and challenges. In M.

Krzanowski (Ed.), *English for academic and specific purposes in developing, emerging and least developed countries* (pp. 68–83). IATEFL.

Rahmawati, Y., Fitriati, S. W., Widhiyanto, & Wahyuni, S. (2024). Evaluating ESP textbooks: Criteria and case studies. *Proceedings of UNNES-TEFLIN National Conference*, 6.

Rezig, N. (2011). Teaching English in Algeria and educational reforms: An overview on the factors entailing students' failure in learning foreign languages at university. *Procedia - Social and*

Behavioral Sciences, 29, 1327–1333. <https://doi.org/10.1016/j.sbspro.2011.11.370>

Salmani-Nodoushan, M. A. (2020). English for Specific Purposes: Traditions, trends, directions.

Studies in English Language and Education, 7(1), 247–268.

<https://doi.org/10.24815/siele.v7i1.16342>

Slimani, S. (2016). Teaching English as a foreign language in Algeria. *Revue des Sciences Humaines*,

44, 33–44. <https://asjp.cerist.dz/en/article/4698>

Torregrosa Benavent, G., & Sánchez-Reyes Peñamaría, S. (2011). Use of authentic materials in the

ESP classroom. *Encuentro*, 20, 89–94.

<https://dialnet.unirioja.es/servlet/articulo?codigo=3736093>

Wannas, A. S., & Hassan, I. H. (2024). Categorizing learners' needs in English for

occupational purposes (EOP): A proposed taxonomy. *Insights into Language, Culture and Communication*,

4(2), 153–166. <https://doi.org/10.21622/ILCC.2024.04.2.954>

Widodo, H. P. (2017). Approaches to needs analysis in ESP curriculum development. *The European*

Journal of Applied Linguistics and TEFL, 7.

Appendices

Appendix A: Teacher Questionnaire

**Title: Teachers' Perceptions of the Relevance of ESP Content in the Textbook
Getting**

Through

Dear Teachers,

You are kindly invited to complete this questionnaire, which is part of a Master's research project conducted in the field of English for Specific Purposes (ESP). This study focuses on the English textbook « Getting Through » **used in the second year with scientific streams of secondary school and aims to gather teachers' perspectives on its content, effectiveness, and suitability for ESP learning.**

Your responses will be treated confidentially and used solely for academic research purposes. Your participation is highly valuable and will greatly support our research. Thank you very much for your time and cooperation

Section One: Professional Background

Teaching experience:

☐ Less than 5 years

☐ 5–10 years

☐ More than 10 years

Have you taught Getting Through (Secondary Education Year Two – Scientific Stream)?

☐ Yes ☐ No

Section Two: ESP Awareness and Background

Are you familiar with the concept of English for Specific Purposes (ESP)?

☐ Yes ☐ No

In your opinion, ESP is relevant to secondary education scientific streams.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Teaching English to scientific stream students requires specific language content related to science.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Section Three: ESP Content in Getting Through

The textbook Getting Through includes topics related to science and technology.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

The scientific content presented in the textbook is relevant to students' academic needs.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

The vocabulary used in the textbook reflects scientific and technical fields.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

The reading texts prepare students for scientific studies in higher education.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Section Four: Language Skills and ESP Orientation

The textbook develops reading skills relevant to scientific contexts. ☐

Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Writing tasks are related to scientific topics or academic purposes.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Speaking and listening activities are appropriate for scientific communication.

☐ Strongly agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly disagree

Section Five: Teachers' Evaluation and Suggestions

In your opinion, does Getting Through meet the principles of ESP? Why or why not?

.....

What ESP-related elements should be added or improved in the textbook?

.....

Appendix B:

Selected Extracts from Getting Through

Extract 1: Cover Page of Getting Through

الجمهورية الجزائرية الديمقراطية الشعبية
وزارة التربية الوطنية

The People's Democratic Republic of Algeria
Ministry of National Education

GETTING THROUGH Secondary Education, Year Two

B. RICHE
H. AMEZIANE
H. HAMI

S.A. ARAB

M. BENSEMMANE

Design and layout: Ch. Azouaoui
Illustration: T. Beghdad
Graphic editing: Y. Kaci Ouali



REVISED EDITION

الديوان الوطني للطباعة المدرسية
The National Authority for School Publications

elbassair.net

موقع عيون البصائر التعليمي

Extract 2: Table of Contents

CONTENTS	
To the student	4
To the teacher	6
Book map	8
Unit One. Signs of the time	14
Discovering language	
- Grammar in context	16
- Say it loud and clear	20
- Working with words.....	21
Developing skills	
- Listening and speaking.....	22
- Reading and writing	24
Putting things together.....	30
Where do we stand now?.....	31
Exploring matters further.....	32
Unit Two :Make peace	36
Discovering language	
- Grammar in context	39
- Say it loud and clear	42
- Working with words.....	43
Developing skills	
- Listening and speaking.....	44
- Reading and writing	48
Putting things together.....	51
Where do we stand now?.....	52
Exploring matters further	53
Unit Three: Waste not, want not	58
Discovering language	
- Grammar in context	61
- Say it loud and clear	64
- Working with words.....	65
Developing skills	
- Listening and speaking.....	66
- Reading and writing	69
Putting things together.....	72
Where do we stand now?.....	73
Exploring matters further	74
Unit Four: Budding scientist	79
Discovering language	
- Grammar in context	82
- Say it loud and clear	85
- Working with words.....	86
Developing skills	
- Listening and speaking.....	87
- Reading and writing	90
Putting things together.....	
Where do we stand now?.....	94
Exploring matters further	95

Unit Five : News and tales.....	98
Discovering language	
- Grammar in context	101
- Say it loud and clear	104
- Working with words.....	105
Developing skills	
- Listening and speaking.....	107
- Reading and writing	110
- Putting things together	113
- Where do we stand now?.....	115
- Exploring matters further	116
Unit Six: No man is an island.	120
Discovering language	
- Grammar in context	123
- Say it loud and clear	126
- Working with words.....	127
Developing skills	
- Listening and speaking.....	128
- Reading and writing	131
- Putting things together.....	134
Where do we stand now?.....	135
Unit Seven: Science or fiction?.....	139
Discovering language	
- Grammar in context	142
- Say it loud and clear	145
- Working with words.....	146
Developing skills	
- Listening and speaking.....	147
- Reading and writing	150
Putting things together.....	153
Where do we stand now?.....	154
Exploring matters further	155
Unit Eight: Business is business.....	159
Discovering language	
- Grammar in context	163
- Say it loud and clear	165
- Working with words.....	166
Developing skills	
- Listening and speaking.....	167
- Reading and writing	171
Putting things together.....	175
Where do we stand now?.....	176
Exploring matters further	177
Scripts	118
Grammar reference,	115
Acknowledgements	208

Extract 3: Unit 1 Opener – Signs of the Time (p. 14)

UNIT 1: SIGNS OF THE TIME

In this unit, you will learn the following:

DISCOVERING LANGUAGE

- **Grammar**
 - Semi-modal **used to**
 - Present simple tense
 - **Going to** and the present progressive
 - Will-future
 - Modals **may, might ...**
 - Relative pronouns
 - Link words: **in contrast to/by contrast...**
 - The comparative and the superlative
- **Pronunciation**
 - Comma pauses
 - Vowels and diphthongs
 - Sound-alikes (homonyms, homophones)
- **Vocabulary**
 - Suffixes **-ic, -ical** and **-ism**
 - Words related to food, clothes...

DEVELOPING SKILLS

- **Functions**
 - Narrating
 - Predicting
 - Expressing certainty and doubt
 - Talking about plans and intentions
- **SKILLS**
 - Reading for general ideas and specific information
 - Listening for specific information and general ideas
 - Writing a policy statement
 - Writing a word map using suffixes
 - Writing a short essay using comparison and contrast
 - Writing a slogan

PROJECT

Making a Profile
About Lifestyles

See page 30 and get
organized before start-
ing the unit.

elbassair.net

موقع عيون البصائر التعليمي

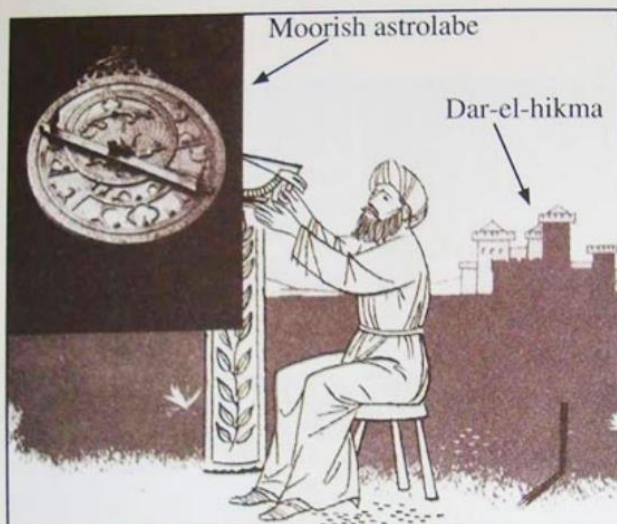
14

Extract 4: Unit 4 Opener – Budding Scientist (p. 79)

UNIT 4: BUDDING SCIENTIST

Think it over

Words to say



geometry
 /dʒɪˈɒmətri/
 geometrical
 /dʒiəˈmetrikl/
 science
 /ˈsaɪəns/
 scientific
 /ˌsaɪənˈtɪfɪk/
 sociology
 /ˌsəʊsiˈɒlədʒi/
 sociological
 /ˌsəʊsiəˈlɒdʒɪkl/
 algebra
 /ˈældʒɪbrə/
 algebraic
 /ˈældʒɪˈbreɪk/
 astrolabe
 /ˈæstrəleɪb/
 air
 /eə/
 boil
 /bɔɪl/
 cipher, cypher
 /ˈsaɪfə/
 now
 /naʊ/
 Moor
 /mʊə/



Extract 5: Unit 4 Listening Activity – University Open Day (p. 86)

elbassair.net

موقع عيون البصائر التعليمي

LISTENING AND SPEAKING

DEVELOPING SKILLS

① Skim through the advertisement below and answer the following questions.

A. Whom does the advertisement address?
B. What is the meaning of “open day” ?

University College Open Day

In addition to the mini-lectures and talks taking place across the campus on Saturday, there are a number of other ways that will help you find out study opportunities for high school graduates in our university.

A. The English Language library will be open from 9.00 to 5.00. This library is one of the largest libraries in our university. We are proud of its outstanding collection of specialist books and learning resources.

B. Guided tours of the Intensive Language Centre and Computer laboratories will be running all day. You are welcome to test the excellent technical facilities of the language centre. Tours leave at 11.00 a.m, 1.00 and 3.00 p.m from the reception area at the main entrance.

② Listen to your teacher reading a dialogue and check your answer to question 1 above.

③ Listen again to your teacher and answer the questions below.

A. Who are the speakers?
B. Who suggests to visit the University first?
C. How does s/he start making his /her suggestion?
D. Which faculty does Jamel want to visit?
E. Which faculty does Maya want to visit? Why?

86

elbassair.net

Extract 6: Unit 4 Reading Text – Static Electricity (p. 89)



READING AND WRITING



1 Read and answer the question in the caption attached to Figure 1 below.



Figure 1. Two balloons, rubbed against a wollen sleeve, repel each other. Could you tell if the charge is positive or negative?



Figure 2. A glass rod rubbed with silk acquires a positive charge. If the balloons are attracted to the rod, what does this mean?

2 Read paragraphs 1 and 2 below and check your answers to the question in caption 1 above. Then discuss the following questions.

- A. Does the illustration (Figure 1) help you to understand paragraph 1? Why?
- B. Have you used the knowledge you have acquired in other subjects (maths, physics ..) to understand what the paragraphs are about? Explain.
- C. Can you answer the question included in the caption attached to figure 2 above? Does the author answer the question in the text at this stage?

We can remove great numbers of mobile electrons from certain materials, leaving an excess of protons. This produces a positive charge on the materials. If a given material picks up an excess of electrons from some other object, a negative charge is produced. The charges, positive or negative, are given the name of static electricity. We can perform a number of experiments with this kind of electricity. §1

Our first experiment illustrates the fact that unlike electrical charges are attracted to each other, and like charges are repelled by each other. Suspend two balloons by equal lengths of thread from a thumbtack fastened to the top of an open doorway. (Figure I). Rub each balloon on a woollen coat sleeve. This will charge both balloons the same way. Note that they repel each other. But we do not know whether the charge they carry is positive or negative. §2

Extract 7: Unit 7 Reading Text – Science or Fiction? (p. 139)

DISCOVERING LANGUAGE



Before you read

Look at the picture of the book cover. Then ask and answer these questions.

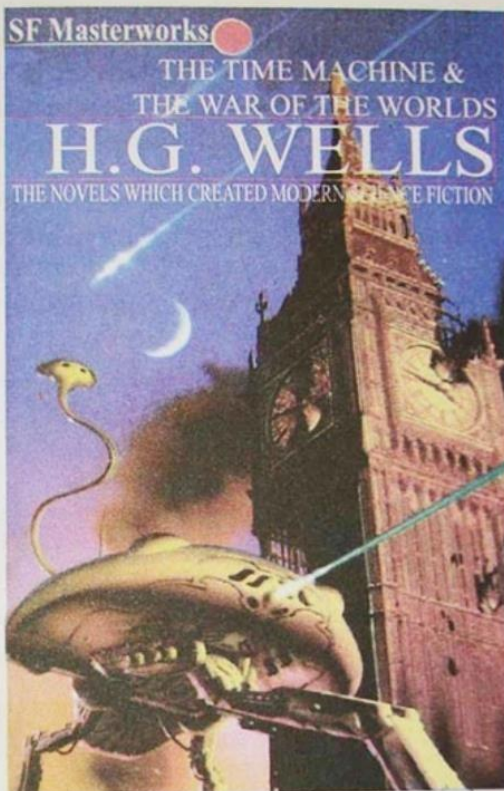
- A. Who is the author of the book ?
- B. What are the titles of the novels included in the book?
- C. What is their theme ?
- D. What science fiction books / films have you read/ seen?
- E. Do you like science fiction? Why (not)?

As you read

① Read the text below and check some of your answers to the questions above.

Science fiction is a genre of fiction and film dealing with imaginary scientific, technological or futuristic themes. The starting point for writers and film makers of sci-fi is: What if it were real? On this supposition, they construct different scenarios about what would happen if Martians, for example, invaded our planet. Some of them have supposed that if Martians invaded the Earth, they would use us as a source of food. Others have imagined that Martians were friendly. So they suppose that if Martians came into contact with us, they would help us cure diseases like cancer.

Sci-fi takes its ideas and concerns from current ideas in science. Sci-fi writers and film makers imagine a recreated past, and a possible future to express these ideas and concerns. These unreal pasts and future histories are filled with speculations about how things would have been different if we had known better and if we had done things otherwise.



Extract 8: Unit 8 Writing Task (p. 172)

□ Write it out

① Re-write the sentences of the text on the previous page which contain the link words **so that** and **in order that** using **in order to/so as to /and to**.

Example

*Most American women went to work outside the home during World War II **so that** they **might** help in the war effort.*

*Most American women went to work outside the home during World War II **in order** /**so as to** help in the war effort.*

② Re-write sentences A-E below using the link words and the modals in the box instead of the link words written in bold type. Make the necessary changes.

so that

may, can, will

in order that

might, could, would

A. She took more than forty word-processing lessons **in order to** have a job promotion.

She took

B. The government refuses to increase the wages **so as not to** cause inflation. The government refuses.....

C. In order to increase the sales, the company recruited an expert in marketing. The company recruited

D. **To** protect the local industry, the government imposed new tariffs on imports.

The government imposed

E. **In order not to** disappoint private exporters, the government will lower the duties.

The government will lower the duties