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Title

**Needs analysis in English for Academic Purposes course design: Present
Situation and Target Situation analysis of Master One Biology Students
at Mohamed Kheider University of Biskra**

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Fulfillment of the Requirements for the Degree of Master in Sciences of Language

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Declaration

I Helis Mohamed Elhadi do hereby declare that this submitted work is my original work and has not previously been submitted for any institution or university for a degree. I also declare that a list of references is provided forward indicating all the sources of the cited and quoted information. This work was certified and completed at Mohammed KHEIDER University of Biskra.

Algeria

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Dedication

It is with genuine gratitude and warm regard that I dedicate this work to my dear family members and with special gratitude to my loving parents, Bouzid and Halima, because if it weren't for your support, I would not have made it so far. You have my infinite gratitude.

I would like to dedicate this work along with my warm gratitude for my dear sisters Nihal and Souad for being a constant source of support and inspiration along the way.

I also want to dedicate this work to my true dear friends for always being there for me, when most needed.

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Abstract

Needs analysis has maintained an essential role in English for Academic Purposes course design. The current study was conducted on Master 1 Biology students at the University of Mohamed Kheider (Biskra). The research aims to investigate the students' academic needs, with a particular focus on their present situation as well as their target situation needs. Furthermore, the research intends to gain general perception of what a potential EAP syllabus would look like. As such, the study was conducted for the sake of providing an initial step forward to an EAP course design for Master one students of biology at Biskra University. Therefore, the researcher opted for a qualitative study, in which data was collected through two Needs Analysis questionnaires. First, a present situation analysis questionnaire was administered to 50 subjects to identify their current situation' needs wants and lacks. Afterwards, a target situation analysis questionnaire was distributed to the students, which aims to locate their target learning needs and their perceptions for further characteristics of a potential EAP course design in terms of syllabus content and teaching-learning materials. On the one hand, the Present situation questionnaire revealed students' motivation to learn English. However, students had major lacks on the speaking and translating skills. On the other hand, target situation questionnaire revealed that students are in need of all language skills, with a special emphasis on communicative skills. In addition, students revealed their need to focus on group work-led interaction activities in the classroom. Consequently, the findings of the study serve as a preliminary standing ground for future initiatives to design an EAP course for Master one Biology students.

Key words: English for Academic Purposes, EAP course design, needs analysis, academic needs, EAP syllabus, present situation analysis, target situation analysis, wants and lacks, teaching-learning materials, communicative skills, Master one Biology students.

List of Abbreviations and Acronyms

CNP: Communicative Needs Processor

EAP: English for Academic Purposes

EGAP: English for General Academic Purposes

EOP: English for Occupational Purposes

ESAP: English for Specific Academic Purposes

ESP: English for specific purposes

EVP: English for Vocational Purposes

ELT: English Language Teaching

FLT: Foreign Language Teaching

GE: General English

NA: Needs analysis

PSA: Present Situation Analysis

L2: Second Language

TSA: Target Situation Analysis

TENOR: Teaching English for No Obvious Reason

List of Figures

Figure 1. A Framework of Course Development Process	15
Figure 2. EAP Course Design: Summary (Jordan, 1997, p. 57)	17
Figure 3. The basis of an EAP syllabus (Jordan, 1997, p. 64)	18
Figure 4. A material design model (Hutchinson &Waters, 1987, p 118)	19
Figure 5. Classification of Needs Analysis According to Hutchinson and Water's (1987)	22
Figure 6. Gender information	41
Figure 7. Age Information	42
Figure 8. Level of English before the Entry to the University	43
Figure 9. Level of English after the Entry to the University	45
Figure 10. Students' Level in Language Skills	46
Figure 11. Students' Opinions on their Course in Relation to their Needs	47
Figure 12. Students' Opinions on the Appropriateness of Time Allocated to English Courses	49
Figure 13. The students' Opinions on the Appropriate Number of English Sessions.	50
Figure 14. Enthusiasm of Students of Biology towards English Learning	51
Figure 15. Students' Attitude towards Having a Good English Level to Find a Job ..	53
Figure 16. Students' Attitudes towards the Want to Speak English Fluently	55
Figure 17. Students' Attitudes towards Listening and understanding English Lectures	56
Figure 18. Students' Attitudes towards writing Lab Reports or Research Papers in English	57

Figure 19. Students' Attitudes towards Translating Biology-Related Scientific Document.....	58
Figure 20. Students' Attitudes towards the Want to learn English to pass exams.....	59
Figure 21. Students' Reported Language Lacks	62
Figure 22. The Areas in Which Students Think They Need English at.....	64
Figure 23. The Students' Classification of Language Skills	65
Figure 24. Students' Need for the Reading Sub-Skills.....	66
Figure 25. Students' Need for the Listening Sub-Skills	67
Figure 26. Students' Need for the Speaking Sub-Skills	68
Figure 27. Students' Need for the writing Sub-Skills.....	69
Figure 28. Students' Preferred Method for Performing Activities.....	70
Figure 29. Students' Preferred Learning Methods	71
Figure 30. Students' Preference of Teaching Materials.....	72
Figure 31. Students' preferences of learning activities	73
Figure 32. Studettes' Additionnel Suggestions	74

Table of Contents

Dedication	II
Acknowledgement.....	III
Abstract	IV
List of Abbreviations and Acronyms	V
List of Figures	VI

CHAPTER 1: GENERAL INTRODUCTION

INTRODUCTION.....	2
1. Statement of the Problem	3
2. Statement of the Purpose	4
3. Research Questions	4
4. Statement of Hypotheses	5
5. Aims and Objectives	5
6. Research Methodology	5
6.1. Research Method	5
6.2. Participants	6
6.3. Data Collection Methods/Tools.....	6
7. Significance of the Study	6

CHAPTER 2: LITERATURE REVIEW

INTRODUCTION.....	9
1. Section One: EAP Course Design	9
1.1. The Origins of ESP/EAP	9
1.1.1 Historical Roots of ESP	9
1.1.2 The Emergence of EAP.....	10

1.2. Definitions of EAP	11
1.3. Types of EAP	11
1.3.1. English for General Academic Purposes (EGAP)	12
1.3.2. English for Specific Academic Purposes (ESAP)	12
1.4. EAP and Study Skills	12
1.5. EAP in Algeria	13
1.6. EAP in Biology Departments	13
1.7. EAP Course Design Overview	14
1.8. Definitions of Course Design	14
1.9 Procedures Of Course Design	16
1.9.1. Conducting Needs Analysis and Set Course Objectives	16
1.9.2. Creating Syllabus Design	18
1.9.3. Developing Course Materials and Tasks	18
1.9.4. Methodology or Course Delivery	20
1.9.5. Methods of assessment and evaluation.....	20
2. Section Two: Needs analysis (NA)	21
2.1. Origins of NA: a Brief Overview	21
2.2. Definition (s) of Needs analysis	21
2.3. Approaches to NA	24
2.3.1. Target situation analysis (TSA).....	24
2.3.2. Present situation analysis (PSA).....	27
2.4. Methods of collecting data	28
2.4.1. Questionnaires	28
2.4.2. Observations	29
2.4.3. Interviews	29

2.4.4. Tests.....	29
Conclusion.....	29

CHAPTER 3: THE RESEARCH METHODOLOGY

INTRODUCTION.....	32
1. Section One: Research Design	32
1.1. Research Philosophy.....	32
1.2. Research Type	33
1.3. Time Horizon.....	34
1.4. Sampling Strategy	35
1.5. Data Collection Tools.....	36
1.5.1. Description of the PSA Questionnaire.....	37
1.5.2. Description of TSA Questionnaire	37
2. Section Two: Methodological Limitations.....	37
Conclusion.....	38

CHAPTER 4: DATA ANALYSIS AND DISCUSSION

INTRODUCTION.....	40
1. Section One: The Present Situation (PSA) Questionnaire	40
1.1. Description of the Questionnaire	40
1.2. Analysis and Discussion of PS Questionnaire.....	40
1.2.1. Part One: General Background.....	40
1.2.2. Part Two: Current situation	47
2. Section Two: Target Situation Analysis (TSA) Questionnaire	63
2.1. Description of the Questionnaire.....	63
2.2. Analysis and Discussion of TS Questionnaire	63

2.2.1. Part One: Target Situation and Language Skills	63
2.2.2. Part two: Future Course Suggestions.....	69
Conclusion	74

CHAPTER 5: GENERAL CONCLUSION

INTRODUCTION.....	76
General Conclusion	76
Research Limitations	78
Further Recommendations	78
REFERENCES	80

APPENDICES

APPENDIX 01.....	90
APPENDIX 02.....	94
الملخص.....	98

Chapter 1: General

Introduction

Introduction

1. Statement Of The Problem

2. Statement of the Purpose

3. Research Questions

4. Statement Of Hypotheses

5. Aims and Objectives

6. The Research Methodology

6.1. The Research Type

6.2. Participants

6.3. Data Collection Tool

7. Significance of the Study

Conclusion

Introduction

Following the Second World War, the world had known a rather revolutionary developments in science, politics and economics. The world also faced the need for a unified language for a global communication, and English took the honor for such position due to the fact that USA and UK were the dominant forces at that period. English has become the world's lingua franca of science (Kırkgöz & Kenan, 2018). The new generation of learners around the globe faced the need to learn English each for their own motives and needs. Therefore, they become aware that they do not need General English (GE) courses, but more specific English courses that allow them to fulfill their requirements in learning or performing an occupation. ESP emerged for the fulfillment of these type of learner's needs. Therefore, "Tell me what you need English for and I will tell you the English that you need" (Hutchinson & Waters, 1978) became a rather prominent trending principal in English language teaching at that time.

Over the past 6 decades, ESP has been expanding into other fields such as; English for Occupational Purposes (EOP) and English for Academic Purposes (EAP) (Paltridge & Starfield, 2013). The latter is seen in higher education institutions around the world, and have become a prominent highly demanded course in Teaching English as Foreign Language (TEFL) across the globe. In addition, EAP course design for university students became a very popular research field. Needs analysis is an initial step for EAP course design, in which it permits the course designer to identify the students' needs, which the course objectives and materials are based on. Consequently, needs analysis became the corner stone for EAP course design.

1. Statement of the Problem

English for Academic Purposes is defined as the teaching of English language to learners who are in need for the language in their studies or academic researches (Jordan, 1997). EAP course design has become the prominent interest of university English teachers. Student's needs analyses allow the teacher to carry out designing the EAP courses with the objective of meeting the student's academic needs. Furthermore, Hutchinson & Waters (1978) highlighted the significance of needs analyses in EAP course design, when they argued that "any language course should be based on needs analyses" (p. 53). In addition, Brown (1995) has briefly summarized the concept of needs analysis as the "systematic collection and analysis of all information necessary to define the language learning requirements of students within the context of a particular institutions that influence the learning and teaching situation" (p. 36). In other words, needs analysis is the sum of all the information necessary for transmitting students' language requirements in the specific situation and institution such as university classes.

However, when conducting a preliminary reading on previous works commenting on Needs analyses in EAP courses in Algeria such as (Assasi, 2021; Haddam, 2015), it is noticed that teachers of EAP courses are clearly not satisfied of the real implementation of EAP course design procedures, especially needs analyses; for it holds a significant value in transmitting student's motives or their specific purposes to learn English. Moreover, Paltridge and Starfield, (2013) highlighted that since 1994 needs analysis in ESP context has gain an increasing value in language teaching. Consequently, regarding its importance to the process of designing a successful EAP course design, the fact that EAP teachers acknowledge that needs analyses are not given adequate attention in the Algerian universities, leading to the belief that needs analysis process in EAP course design in the

Algerian universities in general and Biskra university in particular is inadequate and requires more research studies and reinforcements. Moreover, Assasi (2021) conducted a research on the status of ESP in the Algerian university, in which he noted the true status of ESP courses as “same as in Biskra University, Algerian universities do not offer adequate specialized ESP courses” (p. 441).

Subsequently, the previous studies in EAP needs analysis have addressed the student’s needs in Algerian universities. However, existing researches have dealt with needs analysis in a broad perspective and neglected the focus on present situation and target situation solely. Therefore, EAP needs analysis research field requires for new proper studies to fill in the gap of the previous studies

2. Statement of the Purpose

The existing studies dealing with needs analysis in EAP field need further investigations as most conducted research approaches it from a broad perspective. The current study aims to address need analysis in EAP courses via two major types: Present Situation Analysis and Target Situation Analysis. The main objective is to initiate a potential EAP syllabus that can contribute to the field using Master one Biology students as a sample.

3. Research Questions

The present research study seeks to answer the following questions:

1. What are the lacks, wants and necessities (present needs analysis) of Biology students in learning English?
2. What are the target needs (learning objectives) of Biology students in studying EAP?
3. How does an EAP course for Biology students look like?

4. Statement of Hypotheses

On the light of the research questions, the research on exploring the needs analyses in EAP course design will be guided by the following hypotheses:

1. Present situation analysis reveals that students' lacks wants and necessities revolves around the language skills.
2. Learning objectives of Biology students are mainly concerned with speaking skills
3. EAP course for Biology students relies on a syllabus that targets the students' study skills.

5. Aims and Objectives

The aim of this study is:

To investigate and locate Biology students' present situation as well as target situation needs, and formulate an initial preview of a potential EAP course.

This research will be guided by the following objectives:

1. To locate students' needs in their present situation, including their wants, needs and necessities
2. To identify students' target situation needs and provide the characteristics of an appropriate EAP course for Biology students.

6. Research Methodology

6.1. Research Method

This research will be carried out through the qualitative method. The researcher opted for this method because the current study seeks to explore the different needs of the students (present and target situation), and the method permits further investigation into the internal and external variables of the study at hand. Further elaboration is presented in the Methodology chapter (see **p. 32**).

6.2. Participants

The target population for this study is master one biology department's students of Mohamed Kheider University in Biskra, in which 50 students are selected randomly. Moreover, the probability sampling strategy is applied for the participant's selection to undertake the data collection, which ensures all students have an equal chance of participating in the study.

6.3. Data Collection Methods/Tools

The researcher opted for two semi-structured questionnaires, which are administered to the sample for the sake of gathering and exploring the student's perspectives towards their current English course and more importantly their academic needs for English in the present as well as the target situation.

7. Significance of the Study

The study sheds the light on students' needs analysis in terms of their present needs analysis and target need analysis, which provides the students a chance to express their perceptions towards their current course and their expectations to the adequate course that relies on their needs. The needs that have been mainly seen as irrelevant to the course design process in many universities. The contribution of this study to the EAP field is that it provides in-depth view of biology students' needs in the scope of present and target situation analysis. More importantly, the current study's results serves as an initial stage for a potential EAP course design to Biology students.

Chapter 2: Literature Review

Introduction

I. Section One: EAP Course Design

1. The Origins of ESP/EAP

1.1. Historical Roots Of ESP

1.2. The Emergence Of EAP

2. Definitions of EAP

3. Types of EAP

3.1. English for General Academic Purposes (EGAP)

3.2. English for Specific Academic Purposes (ESAP)

4. EAP and Study skills

5. EAP in Algeria

6. EAP in Biology Department

7. EAP Course Design Overview

8. Definitions of Course Design

9. Procedures of EAP Course Design

9.1. Conducting Needs Analysis And Set Course Objectives

9.2. Creating syllabus design

9.3. Developing course materials and tasks

9.4. Methodology or Course deliver

II. Section Two: Needs analysis (NA)

1. Origins of NA: a Brief overview

2. Definition (s) of Needs analysis

3. Approaches to NA

3.1. Target situation analysis (TSA)

3.2. Present situation analysis (PSA)

4. Data collection methods

4.1. Questionnaire

4.2. Observation

4.3. Interview

4.4. Tests

Conclusion

Introduction

Needs analysis is regarded as the fundamental element of EAP course design. This chapter is concerned with two major sections namely EAP course design and needs analysis. The two sections are discussed thoroughly from introducing their definitions and origins to their major types. In addition, the current chapter attempts to reveal the procedures of EAP course design as well as the popular data collection method of need analysis.

1. Section One: EAP Course Design

1.1. The Origins of ESP/EAP

Since the past 80 years, the world has showed an increasing interest towards learning English in a more unconventional new method, rather than the tradition General English (GE) teaching. In addition, the new trend to learn more specialized English extended to include academic communities. Further elaboration is presented in the coming headings

1.1.1 Historical Roots of ESP

Along the journey of tracing back the history of English for specific purposes and diving in to its literature, many distinguished findings can be highlighted; Hutchinson & Waters (1978) outlined three factors of ESP's development. First, with the end of World War II in 1945, English had established itself as a language to be learned by many individuals at that period. It became a common language of commerce among people all across the globe, leading to a high demand for a Brave New World. The second factor that contributed to the creation of ESP was a linguistic revolution; conveniently, the oil crisis of the 1970s ushered in a new connection between the West and the oil-rich nations, thus the convenience of using English as a medium of communication. A further reason was much more psychological

than linguistic in nature, namely the transition from teacher-centeredness to learner-centeredness; the general new tendency was a strong emphasis on the learner. Taking into consideration that learners employ a variety of learning methods, abilities, and styles, the principal interest was given to how learners acquire language and the diversity in how language is acquired rather than the methods of language acquisition. Consequently, new approaches and techniques were required for the sake of fulfillment of specific predetermined motives or purposes to learn English. These factors marked the birth of English for specific purposes (ESP) since General English (GE) could not meet the specific needs of learners, and “Tell me what you need English for and I will tell you the English that you need” (Hutchinson & Waters, 1978, p. 8) became the trending principal of ESP at that time.

Paltridge and Starfield (2013) in the handbook of English for Specific Purposes defined ESP as “the teaching and learning of English as a second or foreign language where the goal of the learners is to use English in a particular domain” (p. 2). Similarly, the term ‘ESP’ often refers to the teaching of English for an explicitly utilitarian purpose (Mackay and Mountford 1978, as cited by Chams, Heddami, & Bensafa, 2017).

1.1.2 The Emergence of EAP

ESP as an umbrella term is often considered to cover two primary sub-branches: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). Another subfield of ESP has been added to the previously mentioned; English for Vocational Purposes (EVP) (Paltridge & Starfield, 2013 as cited in Kırkgöz & Kenan, 2018). The term ‘English for Academic Purposes’ was first used in 1974 (Johns, 1981 as cited in Jordan, 1997). EAP has developed over the past four decades from the broader field of English for specific purposes (ESP) and has grown considerably in prominence over the last two decades, spurred by global development in the use of English for profession as well as

academic study. EAP has become popular due to the large numbers of international students studying in British and American universities. Therefore, these institutions offer EAP courses in (both pre-sessional and in-sessional) to help students enhance their academic communicative skills in English in order to meet the requirement needed for university admissions where English is the medium of instruction. (Elsaid Mohammed & Nur, 2018)

1.2. Definitions of EAP

If a preliminary definition were in order, it would be that “EAP is concerned with those communication skills in English which are required for study purposes in formal education systems” (ETIC, 1975, as cited in Jordan, 1997).

Flowerdew & Peacock (2001) and Jordan (1997), share the belief that EAP is generally characterized as teaching English with the goal of supporting students' study or research in that language.

Similarly, Paltridge and Starfield (2013) asserted that the field of English for Academic Purposes (EAP) is concerned with investigating and teaching the English required by individuals who use the language for academic purposes.

In another perspective, Hyland (2006) considered EAP to be a handmaiden to those major sciences that are more directly devoted to producing knowledge or revealing facts.

1.3. Types of EAP

In a more elaborate point of view, Coffey (1984) proposed that EAP is divided into two parts: common core and subject-specific. To put it differently; English for General Academic Purposes (EGAP) and English for Specific Academic Purposes (ESAP) (Blue, 1988). Conveniently, Jordan (1997) added, “A large proportion of the common core element is more usually known as study skills” (p.5).

1.3.1. English for General Academic Purposes (EGAP)

‘EGAP’ refers to the teaching of skills and languages that are common throughout disciplines” (Dudley-Evans & St John, 1998, p. 41). A more simplified manner is to say that the skills associated with study activities such as listening to lectures, participating in supervisions, seminars, and tutorials, reading textbooks, articles, and other reading materials as well as writing essays, examination answers, dissertations, and reports are more often associated with English for Academic General Purposes (Blue G. M., 1993).

1.3.2. English for Specific Academic Purposes (ESAP)

‘ESAP’ refers to the teaching of the features that distinguish one discipline from others” (Dudley-Evans & St John, 1998, p. 41). To clarify more, Dudley-Evans and St John (1998) cited from Turner (1996) the argument that ESAP incorporates EGAP skill practice with assistance for students in their real subject activities, and it takes on a developmental function.

1.4. EAP and Study Skills

Robinson (1991) believes that Study skills can be described explicitly as the more technical aspects of study such as; referencing, utilizing libraries, dissertation formatting, and so on. On the other hand, Richards and Schmidt (2002) provided a more detailed definition of study skills as the:

Abilities, techniques, and strategies, which are used when reading, writing or listening for study purposes. For example, study skills needed by university students studying from English-language textbooks include: adjusting reading speeds according to the type of material being read, using the dictionary, guessing word meanings from context, interpreting graphs, diagrams and symbols, notetaking and summarizing (p. 521).

In other words, EAP learners or in a more specific population, university students are in need of learning more than the traditional linguistic knowledge in their learning path. In a similar claim, Hutchinson and Alan Waters (1978) asserted regarding all language usage are common reasoning and interpretation processes, which enable learners to derive meaning from discourse in spite of the surface forms. Therefore, University's EAP courses should not address solely the surface levels of language. Instead, the emphasis should be on underlying interpretative skills that allow students to deal with surface elements.

1.5. EAP in Algeria

As EAP courses have been spreading around the universities across the globe, Algerian universities have had their portion of such growth as well. Consequently, there has been a growing need for more efficient and specialized English courses (Boudersa, 2018). Subsequently, upon such demands, Algerian universities now provide GE and EAP courses at various levels in a wide range of fields of study such as in the scientific and social sciences departments such as; biology, psychology, physics, and many other affiliations. However, a study conducted by Assasi (2020) in which he used a semi-structured interview to investigate '*The Status of ESP in Algeria*'. His study concluded that ESP teacher in Mohamed Khider university believe that despite the fact that it is one of the most essential components in accelerating and advancing sustainable development in undeveloped countries, Algeria is in need of greater attention and support in ESP for both academic and professional purposes. Accordingly, Assasi (2020) and Boudersa (2018) asserted that bearing in mind the fact of offering ESP classes to universities (which falls in the area of EAP), yet there is a constant complaint that students are not taught EAP; their courses are more GE than EAP.

1.6. EAP in Biology Departments

Regarding the status of EAP courses in the departments of biology, a distinguished research paper was conducted by Boudersa and Yahiaoui (2020) at the

University of Mascara, in which the researchers selected the study sample to be level one biology students. The research highlighted that EAP courses in the case of biology students are of less significance in comparison with other high coefficients modules in term of time portion per week. To add more, the study revealed that most of the EAP teachers are GE teachers with the License or Master degree. Such results may be generalized to a certain extent to most biology departments around the country.

1.7. EAP Course Design Overview

EAP teachers have the ability to constructively intervene in the learning process and play a significant role in the acquisition of EAP abilities by learners. They can assess students' needs and determine what to educate in response. They may design a logical learning course and sequence of learning, choose suitable activities and teaching approaches, and reduce students' limits and problems in L2 EAP acquisition (Klimova , 2015). In other words, EAP teachers are capable of tailoring their course to fit their learners' needs with the aim of meeting the predetermined needs by the end of the course. Thus, EAP teachers are in need of familiarizing with EAP course design and its procedures.

1.8. Definitions of Course Design

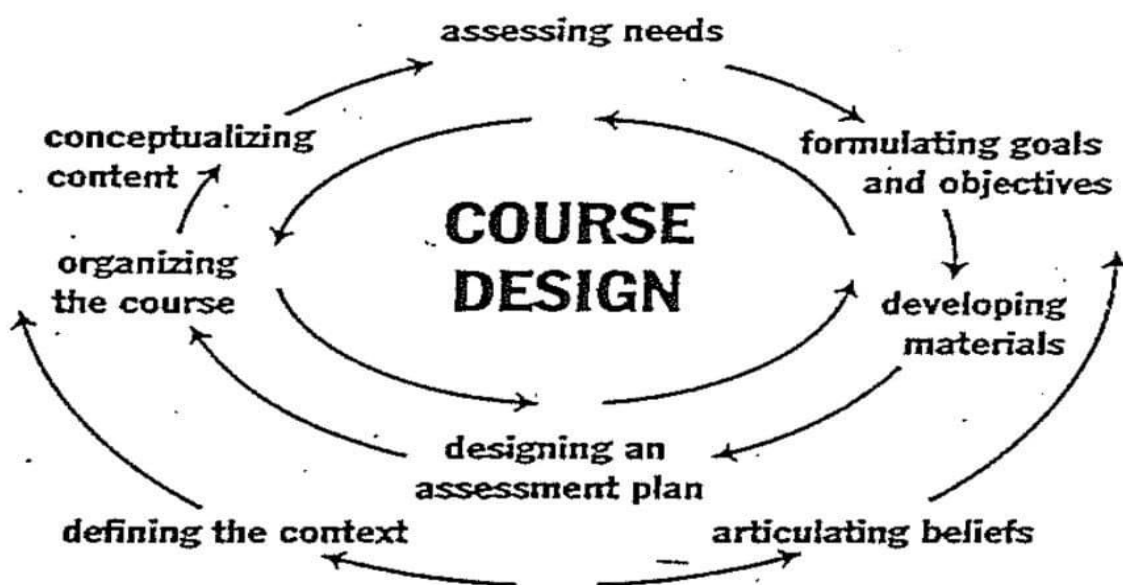
Hutchinson and Waters (1978) referred to course design as “a series of teaching-learning experiences, whose ultimate aim is to load the learners to a particular state of knowledge” (p. 65).

In addition, Robinson (1991) Defined ESP course as “the product of a dynamic interaction between a number of elements: the results of the need analysis, the course designers' approach to syllabus and methodology, and existing materials (if any). All of these are modified by the contextual constraints” (p. 34)

Accordingly, Graves (2000) considers course design to be a combination of components, comprising of; setting objectives based on learners' needs analysis to form content, materials, methods as well as evaluation.

In other words, course design refers to the collaboration of different processes and methods; needs analysis, interpretation on the NA, selecting teaching methodology, etc. in create learning objectives and select the teaching materials needs for the fulfillment of those predetermined goals.

Figure 1. A Framework of Course Development Process



Graves (2000), in her *Designing Language Courses: A guide for teachers* book, she provided the following framework of Course Development Process that highlights the values of needs analysis in course design process (in **Figure 1**).

(**Figure 1**above), demonstrated that course design is a continuous process that relies majorly of needs analysis as the starting point of the process. In addition, the figure shows that course design stages are ordered as follows; interpretation of NA, formulating the study goals and objectives, developing materials, designing assessment plan, organizing

the course, conceptualizing content and assessing the students' need by the end of the course to evaluate the course in itself.

1.9. Procedures Of Course Design

Klimova (2015), in an article in *Procedia - Social and Behavioral Sciences*-attempts to answer the question of how to successfully present information to students in order to achieve their study goals. She suggests an EAP course design model, which consists of:

- Conduct needs analysis and set course objectives.
- Create syllabus design.
- Develop course materials and tasks.
- Deliver the course.
- Set methods of assessment and evaluation of the course

Adopted from (Klimova, 2015, p. 635)

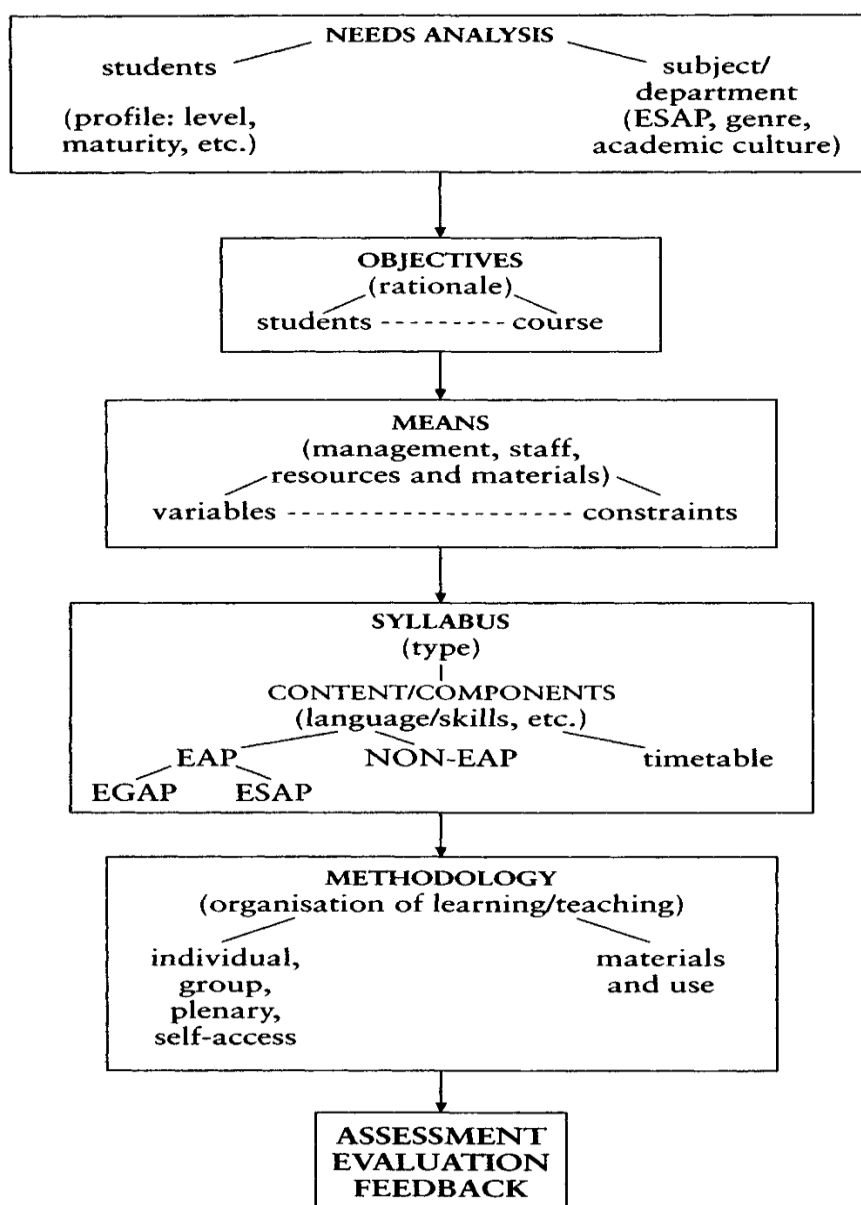
1.9.1. Conducting Needs Analysis and Set Course Objectives

According to Hutchinson and Waters (1978), the analysis of what the learners need the language for should be the beginning point of any language program. To put it differently, EAP is substantially characterized by its focus on fulfilling the academic needs of students. Consequently, an analysis of the present situation, which is followed by the target situation analysis, may shed the light on students' needs, which in turn assists in the creation of a profile in order to set cohesive goals and making future selections on course content (McDonough, 1984).

Meanwhile, Jordan (1997) summarized the course design process in the following (**Figure 2**), in which he highlighted the value of needs analysis to designing the EAP course.

(Figure 2 below) below illustrates that the course design process begins with a needs analysis process, and then NA results are interpreted into forming profile on the students as well as the target institution or context. Next, the course designer will be able to select the means (resources and materials to be used), then selecting the syllabus content and selecting the adopted methodology to be applied in teaching the course. Finally, assessment and evaluation are essential for receiving the feedback on the current course value and quality.

Figure 2. EAP Course Design: Summary (Jordan, 1997, p. 57)

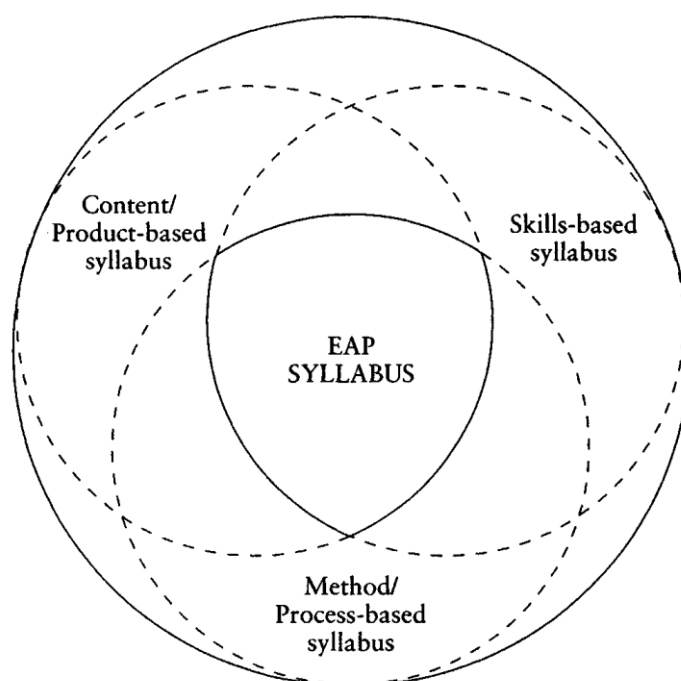


1.9.2. Creating Syllabus Design

Since the 1980s, three task-based syllabi have been commonly implemented in the teaching of EAP; the procedural syllabus, the process syllabus, and the task syllabus (Klimova, 2015). In defining syllabus, Hyland (2006) states that it “is a plan of what is to be achieved through teaching and learning, identifying what will be worked on in reaching the overall course aims and providing a basis for evaluating students’ progress” (p. 83). Furthermore, Jordan (1997) believes that an EAP syllabus is likely to be a combination of various syllabus types ‘a multi-syllabus’, which is illustrated in **Figure 3**.

(**Figure 3** below), demonstrates how an EAP syllabus can be seen as the birth child of the Product-based syllabus, skills-based syllabus as well as process-based syllabus.

Figure 3. The basis of an EAP syllabus (Jordan, 1997, p. 64)



1.9.3. Developing Course Materials and Tasks

As presented, EAP courses are each unique to the specific situation and learners it is conducted to. Thus, it is the teacher's responsibility to develop the teaching materials, which are suitable for the students' needs. To clarify more, Benyelles (2010) stated:

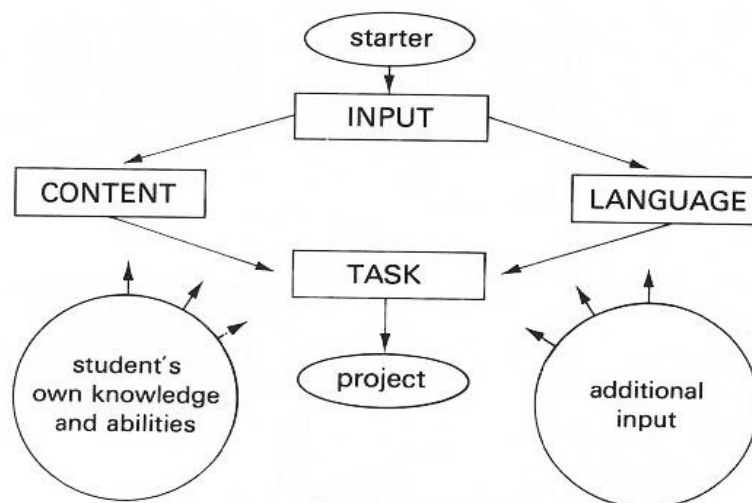
During materials selection three points are stressed:

1-select materials with properly difficult language input in terms of vocabularies (general and specific) and structures, which should be graded from simple to difficult

2-pay attention to subject content input in the adapted materials, usually from general to specific topics;

3-adapt adequate and appropriate activities in the selected materials, namely the activities in each unit should be coherently matched (p. 24).

Figure 4. A material design model (Hutchinson & Waters, 1987, p 118)



(Figure 4 above), represents the significance of tasks in a learning unite, in which the task allows the implementation of course content in the target language. In addition, the figure shows that, students can also make use of their own knowledge and abilities as well as the additional input provided in the learning-teaching environment in the unite tasks.

On the other hand, Hutchinson and Waters (1987) asserted “the primary focus of the unit is the task and that the model acts as a vehicle which leads the learners to the point where they are able to carry out the task” (p. 109).

Consequently, they provided a model for materials design (see **Figure 4**) in which they introduced ‘input, content, language and task’. For the sake of illustrating, ‘input’

refers to any piece of communicative data derived from learners needs, ‘content’ refers to the non-linguistic content as Hutchinson and Waters (1987) convey that “as language is not an end in itself, but a means of conveying information and feelings about something” (p. 109). As for ‘language’ or language focus, it is studying language then practicing it, and ‘task’ is the communicative task in which learners can employ the knowledge acquired along the course. Concerning language and content, they are derived from the input and chosen based on what the learners will require to complete the assignment (Skela & Burazer, 2021).

1.9.4. Methodology or Course Delivery

Klimova (2015) highlighted the essential role of EAP teachers in the course delivery process. Teachers are responsible of maintaining a proper fulfillment of the course objectives and meeting students’ needs. Accordingly, Klimova (2013 as cited in Klimova, 2015) provided a wide variety of tasks, to be performed by teacher, to assure the accomplishment of the course objectives such as; delivering tutorials, providing students with a study guide, delivering feedback on students’ individual assignments and working together with a subject specialist.

1.9.5. Methods of assessment and evaluation

Assessment is defined as “The ways used to collect information about a learner’s language ability or achievement in order to modify instruction and assist learners’ progress towards control of their skills and understandings” (Hyland, 2006, p. 311). Teachers frequently use assessments to promote their students learning and to monitor students’ progress. Accordingly, there are numerous types of assessment (Klimova, 2013, as cited in Klimova, 2015).

- 1) Formative and summative
- 2) Objective and subjective;

3) Informal and formal.

Evaluation in EAP courses is used as a means of collecting an extremely beneficial feedback by the teacher or institution, a feedback that is cultivated to improve the teaching process (Klimova, 2015). Moreover, it is appropriate to say both in terms of development and the end product, the term "evaluation" refers to both students and courses as a whole (Jordan, 1997).

2. Section Two: Needs analysis (NA)

2.1. Origins of NA: a Brief Overview

Needs analysis (also known as 'needs assessment') was first mentioned in the 1926 in a survey report by Michael West (West, 1988). Prior to needs analysis becoming a vital element of course design process as known nowadays, it was first introduced to cover or perhaps differentiate between what learners are required to perform in the target language in parallel to reaching the target situation and how will learners best learn the target language during training (West, 1994). After 50 years, needs analysis had reappeared in the field of English language teaching (ELT) and have subsequently been recognized by a number of researchers, including (Munby, 1978; Hutchinson and Waters, 1987; Jordan, 1997; Dudley-Evans & St John, 1998; Hamp-Lyons, 2001; Songhory, 2008), which expanded the term to how it is known at present time.

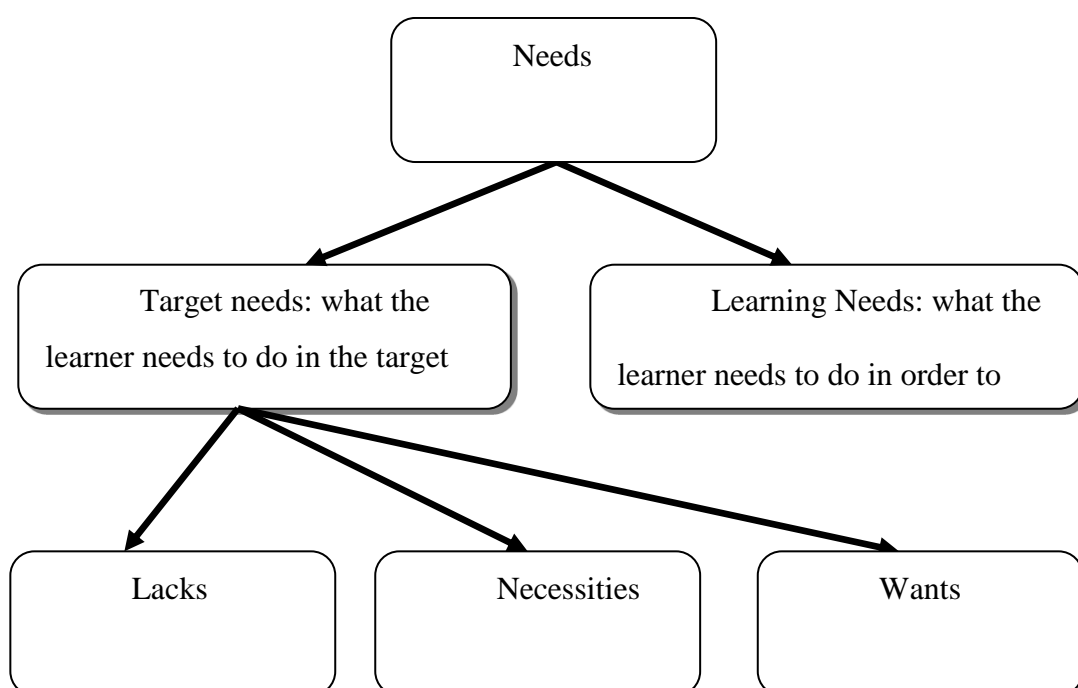
2.2. Definition (s) of Needs analysis

Nunan (1988) claimed that needs analysis refers to a collection of procedures for obtaining information about students and communication tasks to be used in the syllabus. In a similar perspective, Dudley-Evans and St John (1998) consider needs analysis as "the corner stone of ESP and leads to a much-focused course" (p. 122). In simple terms, they believe that NA is a departure point for a course designer.

According to Lwai et al (1999), the term needs analysis generally refers to the processes involved in obtaining data that will be used to create a syllabus, which in turn will fulfil the learning needs of a certain set of learners.

Similarly, Johns (1991) sees needs analysis as the initial phase in course design is needs analysis, which is essential for the validity and relevancy for all corresponding course design activities.

Figure 5. Classification of Needs Analysis According to Hutchinson and Water's (1987)



Hutchinson and Waters (1978) provided a clear conceptualization of needs analysis as an umbrella term which covers two terms namely ‘target needs’ and ‘learning needs’. The authors illustrated that target needs are concerned with what learners need to perform in the target setting, as it contains three helpful terms: necessities; are what students must know to perform effectively in the target situation, and wants; are what learners like to learn from the language course, and lacks; are the gap between learners’ current proficiency and the required proficiency in the target situation. Regarding learning needs, Hutchinson and

Waters (1987, p. 54) defined learning needs as “what learners need to do in order to learn”.

(**Figure 5**) displays Hutchinson and Water's (1987) Classification of Needs Analysis.

(**Figure 5**above), reveals the classification of needs analysis as to be either what the learner needs to do in the target situation (lacks, want and necessities), or what the learners need to do in order to learn

Needs analysis has been considered to be an integral component of course design process by multiple distinguished authors such as Hyland (2007). He highlighted the use of systematic means to define the specific sets of skills, linguistic forms and communicative practices that a particular group of learners must acquire is central to ESP. To Hyland (2007) NA is the systematic instruments that ESP course designers use to identify the collection of skills, communication abilities as well as the linguistic competence required for the syllabus, materials and underlying the pragmatic engagements with occupational, academic and professional contexts.

In the same vein, Basturkmen (2010) believes that NA as the first phase in course design is crucial since it entails determining the ‘what’ and ‘how’ of a course. The author provided a further look to the ‘what’ and ‘how’ in her definition of Na:

Needs analysis in ESP refers to a course development process. In this process, the language and skills that the learners will use in their target professional or vocational workplace or in their study areas are identified and considered in relation to the present state of knowledge of the learners, their perceptions of their needs and the practical possibilities and constraints of the teaching context. The information obtained from this process is used in determining and refining the content and method of the ESP course (p. 19).

2.3. Approaches to NA

NA has known many surveys of approaches since it was reintroduced to the field of Foreign Language Teaching (FLT) in the 1970s such as (Jordan, 1977; Hutchinson and Waters, 1978; Munby, 1978; Songhory, 2008; Basturkmen, 2010). In addition, West (1998) in the state of the art article described the shift of needs analysis focus from EOP at its early stages to include EAP as well, which later included GE as well. Furthermore, West (1998) argued that it is impossible to define the need of GE learners in great deal of precision due to their learning process in Teaching English for No Obvious Reason (TENOR) (Abbot, 1981, as cited in West, 1998). To highlight, the majority of past surveys of approaches to needs assessment lies in the path of ESP rather than GE. The current research discusses the two major approaches to needs analysis, namely Target Situation Analysis (TSA) and Present Situation Analysis (PSA).

2.3.1. Target situation analysis (TSA)

Target situation analysis, according to Songhory (2008), was first used by Chambers in his 1980 article as he attempted to describe the terminology ambiguity. Chambers (1980) used the term “communication in the target language” to refer to TSA. Meanwhile, by the time Munby (1978) introduced the ‘Communicative Needs Processor’ (CNP), he had revolutionized the concept of needs analysis. Hutchinson and Waters (1978) acknowledged Munby’s work by stating:

With the development of the CNP, it seemed as if ESP had come to age. The machinery for identifying the needs of any group of learners had been provided; all the course designers had to do was to operate it.
(p. 54)

Munby's CNP sets the target needs and the target level performance by analyzing the target situation. In addition, Munby (1978) introduced an overall model, which simply represents needs analysis to be central to ESP. In addition, Munby's CNP sets the target needs and target level performance by examining the target situation, and his overall model explicitly highlights the importance of needs analysis as essential to ESP, indeed as the required preliminary step in materials or course design (West, 1998 as cited in Songhory, 2008). Thus, Munby's (1978) overall model consists of:

- 1) Participants: A course designer need to collect information about learner's identities, language, age, nationality and knowledge of the target language (Songhory, 2008).
- 2) Communicative needs processor: It investigates specific communication needs based on sociocultural and stylistic variables that interact to provide a profile for these needs (Munby, 1978).
- 3) Profile of needs: Concluded from the data analysis through the CNP.
- 4) The meaning processor: In which parts of the sociocultural established profile of communication needs are transformed into semantic subcategories, mostly pragmatic in nature, and labeled with an attitude ton (Munby, 1978).
- 5) The language skill selector: "the profile of needs is interpreted in terms of the specific language skills that are required to realize the events or activities that have been identified in the CNP" (Munby, 1978).
- 6) The linguistic encoder: It explores " the dimension of contextual appropriacy" (Munby, 1978)
- 7) The communicative competence specification: It interprets the profile of needs as well as identifies the participant's target communicative competence (Songhory, 2008).

In a more specific note, Munby (19978) illustrated in the CNP that “we take account for the variables that effect communication needs by organizing them as parameters in a dynamic relationship to each other” (p. 32). Furthermore, Munby’s parameter consists of:

- 1) Purposive domain: identifying the type of ESP (EOP or EAP) and purpose of the selection.
- 2) Setting: refers to the spatial and temporal as aspects of the situation as well as the psychological environment in which the language will be used.
- 3) Interaction: identifying the participants’ interlocutor in the target language as well as predicting the relationship between them.
- 4) Instrumentality: identifying of the specific medium (i.e., whether the target language will be used in a written or spoken form or both), mode (i.e., if the language will be used in a monologue, dialogue), channel which indicates whether communication is face to face, phone calls, radio, etc.
- 5) Dialect: dialects that learners comprehend or generate in terms of their spatial-temporal or social context.
- 6) Communicative key: the manner in which participants will be required to carry out the activities associated with an event.
- 7) Target level: the level of language proficiency needed by the end of the course, which may differ based on the participants’ required skills.

Although Munby’s (1978) Model has been the basis of most researchers in the field of target situation needs analysis (Robinson, 1991). However, it is not without its critics. One of his major critics was Hutchinson and waters (1978), they criticized Munby’s Model to be extensively time consuming for taking the effort of establishing a target profile for each student at a time. Indeed, Dudley-Evans and St John (1998), Hutchinson and waters (1978) similarly believed that that the model focused on an analyst view on the expense of

learner's viewpoint regarding their needs. In the same argument, Hutchinson and Waters (1978) pointed out that the model provided no distinction between necessities, wants, and lacks.

2.3.2. Present situation analysis (PSA)

Present situation analysis (PSA), was first coined by Richterich and Chancelal (1977 as cited by Jordan 1997, p. 24). The present situation analysis is an examination of the current state of teaching and learning in terms of student profiles, staffing, resources, syllabus and academic records providing data on students' language acquisition (Gusti, 1999; as cited in Yundayani, 2018). To simplify, PSA "will inform what the students can do with the language now" (Westerfield, 2010 as cited in Hossain, 2013). Therefore, Basturkmen (2010) reminds that PSA identifies for the course designer the learners' current level of knowledge as well as of performance in relation with the requirements of the target situation. Another perspective is that PSA estimates strengths and weaknesses in language, skills, learning experiences" (Dudley-Evans & St John, 1998, p. 125). In other words, present situation analysis is a means of investigating the precise level of proficiency and knowledge of the target language before taking the EAP course.

In this approach, Jordan (1978) identifies the source of information as "the students themselves, the teaching establishment and the 'user institution', e.g. place of work, sponsoring body" (p. 24). To clarify, the author asserted that, in the present situation analysis, EAP teachers or course designers collect the required information based on ability, resources as well as views on language teaching/learning. Accordingly, (Songhory, 2008) believes that if a PSA is in order, placement tests are needed as a data-gathering tool for the aim of determining students' deficiency level. In the same. In agreement, Benyelles (2010) acknowledged, "Apart from strengths and weaknesses, the collected information will give an

idea about students' attitudes towards ELT in a given situation, and the available resources” (p. 17).

According to (Jordan, 1978) course designers cannot rely on either of TSA or PSA alone, they tend to investigate information regarding both target situation analysis as well as present situation analysis, for they are considered to complement one another.

2.4. Methods of collecting data

For the sake of conducting an EAP needs analysis, a course designer would face the need of identifying the subject matter to be administered at which point of the course, in addition to the required language level, study situation, study skills in relation to the target situation (Jordan, 1997). There exists a common ground among many authors such as Basturkmen, (2010); Long (2005); Dudley-Evans And St John (1998) that a variety of methods can be adopted to collect data in NA, they agreed on choosing questionnaires, observations, interviews and tests.

2.4.1. Questionnaires

A questionnaire is a collection of questions regarding a particular topic or range of topics presented to be replied by a participant Check lists and rating scales are two major types of questionnaires (Richards & Schmidt, 2002). Questionnaires are often chosen as the primary data collection instrument in surveys. Although questionnaires display a rather extra reliability than other types of data collection methods, for it offers densier and information that is more concise. However, the participants of the questionnaire may face some ambiguity in the questions and be misled to falls assumptions, which in turn will lead to irrelevant misguided answers (Long, 2005). Therefore, providing participants a guiding feedback may operate as a precaution for the disadvantage mentioned above.

2.4.2. Observations

Observation method of data collection for needs analysis has been proven efficient in detecting learners' difficulties especially in speaking and listening difficulties (Jordan, 1997). Mainly, observation is preferable if students' self-confidence needed to be examined. However, observations may be seen as immensely time consuming.

2.4.3. Interviews

Another widely used method of data gathering is the interview, with its two main types; 'structured' or 'unstructured'. The distinction between the two lies in the types of questions asked to students. For structured interviews, closed ended questions are implemented. However, the interviewer can clarify any interpretation of the interview questions (Jordan, 1997). As for unstructured interviews, open-ended questions are used, for they permit collecting private information from individuals (Ibrahim, 2017). However, interviews can be regarded as time consuming as observations.

2.4.4. Tests

The approaches used to investigate the learners' needs might vary to include 'tests', for the sake of—"to determine their skill and knowledge level, their abilities and interests, attitudes and aptitudes, as well as their personalities traits" (Sava, 2012). In other words, tests are administered to learners for the aim of determining their current level and the training level they need.

Conclusion

It is concluded that, EAP teachers or course designers share the knowledge that needs analysis is a key component of EAP course design. As it serves as a cornerstone, in which the course will be designed upon. Thus, EAP Teacher ought to further extend their

knowledge about EAP course design procedures as well as needs analysis process. In addition, the proper implementation of a needs analysis process will demand the rigorous investigation of both target situation analysis as well as the present situation analysis using proper data gathering tools.

Chapter 3: The research Methodology

Introduction

1. Section One: Research Design

1.1. Research Philosophy

1.2. Research Type

1.3. Time Horizon

1.4. Sampling Strategy

1.5. Data Collection Tools

1.5.1. Description of the PSA Questionnaire

1.5.2. Description of the TSA Questionnaire

2. Section Two: Methodology Limitations

Conclusion

Introduction

For the sake of perusing the aims of this study, which is to identify the present, as well as the target needs of master 1 biology students for a potential EAP course design, the current chapter is devoted to introducing the selected methodology for the present study. The first section handles the discussion of research design, which includes research philosophy, research type, research strategy, the designated time horizon, sampling strategy and data collection method. As for the second section, the methodology limitation of the study is introduced.

1. Section One: Research Design

A research design is a plan or framework of research methodologies and procedures selected by a researcher to provide a road map, that seeks to achieve the research's intended aims and objectives.

1.1. Research Philosophy

The present study adopts the interpretivism philosophy for it serves the general goal of the research, which opts for an in-depth understanding of students' needs in relation to the internal as well as the external variables that influences these needs. To simplify, interpretivism regards humans as distinct from physical phenomena because they provide greater depth in meanings on the notion that humans cannot be investigated in the same manner that physical phenomena can (Alharahsheh & Puis, 2020). In addition, Meyer (2008) argued that social constructions; language, awareness, shared meanings, based on the most recent interpretive researchers, are the only ways to get access to reality. In the same vein, Ryan (2018) believed that "Interpretivism argues that truth and knowledge are subjective, as well as culturally and historically situated, based on people's experiences and their understanding of them", and that researchers can never be fully detached from their own

ideologies, which is why it will always influence how they gather, interpret, and analyse data.

Selecting an interpretivism paradigm according to Pham (2018) enables the researcher “not only describe objects, human or events, but also deeply understand them in social context” (p, 3). Therefore, applying for an interpretivism paradigm in the current needs analysis study, permits researcher to gain more insight into further subjective opinions of students in terms of their efficiency levels and their perceptions toward the quality of their current English course. Furthermore, interpretivism is best suited for the current needs analysis study, for it gains the research a deeper perspective into individual’s first-hand past experiences in previous English courses and exposure to English language, rather than relying on generalized measures or predictions as provided by the opposite paradigm (Alharahsheh & Puis, 2020). The stated conveniences concludes the suitability of applying an interpretivism paradigm in conducting the needs analysis research at hand.

1.2. Research Type

This research adopts the inductive approach for it permits the flexibility and practicality for the need in exploring the undetermined needs of the students. In other words, after the research process has begun, the researcher is allowed to modify the study's direction (Dudovskiy, 2020). The adoption of inductive approach signifies that the research study will be exploratory in terms of research purposes, which serves the research study for it “tends to tackle new problems on which little or no previous research has been done” (Brown, 2006). Thus, it is convenient for the study at hand in which the author has a new ground to explore and there is no possible method of uncovering the specific academic needs of the students before conducting the study or simply by looking through the past studies.

Moreover, the study will be carried out through the qualitative method, such method serves best the author’s research because of its advantages of propelling researchers

to “analyse the various factors which motivate people to behave in a particular manner or which make people like or dislike a particular thing” (Kothari, 2004, p. 3). One further benefit of implicating a qualitative research, according to Myer (2013) a researcher can learn what individuals are thinking by only talking to them or reading what they have written, and comprehending their ideas and beliefs contributes significantly to explaining their behaviors. In other words, the core principal of qualitative research is that striving to grasp an understanding or an explanation of human attitudes, beliefs and thoughts without the interaction with individuals and understanding their feedback (written or spoken), is impossible. Therefore, the researcher opted for the qualitative method to investigate the TSA and PSA, for it allows the researcher to interpret and explain as well as to understand the attitudes and of students towards their present situation (present course, efficiency level and needs), and target situation (target course suggestions, learning preferences) through the interpretation of their writing feedback gathered in the data collection stage.

1.3. Time Horizon

The present research, in terms of the time horizon and with consideration of research aims and questions, has opted for the implementation of a longitudinal study. It refers to the study in which repeated measurements of the same participants across time are applied (Rajulton, 2001). In addition, Caruana, Roman, Hernández-Sánchez and Soll (2015) regard the “Longitudinal studies employ continuous or repeated measures to follow particular individuals over prolonged periods of time” (p. 537). Furthermore, Rajulton (2001) indicated that an advantage of applying the longitudinal study is that it explicitly allows, “Establishing temporal order, measuring change and making stronger causal interpretations” (p. 171). Consequently, the current study opted for a longitudinal study, for it permits the researcher to understand and interpret the registered measures of needs, attitudes and perceptions of students’ in the PSA and the TSA gathered results. Moreover,

longitudinal studies permit for repeated measurements of the same participants across time, which indicates that any variations in the outcome measure cannot be identified in relation to individual differences (Thomas, 2020). Therefore, a longitudinal study would best suit the current study for it eliminates any students' traits differences they may affect the outcome of the PSA in relation to the TSA. A longitudinal study is the best-suited study for the clear interpretation of the needs analysis study at hand.

1.4. Sampling Strategy

First, the target population of the present study is Master 1 biology students of Mohamed Khider university of Biskra. A sample of 50 students were selected to participate in the study. As for the sampling process, this study integrated the probability strategy for its core principal "that every elementary unit has the same probability of being chosen" (Igwenagu, 2016). In other words, every individual is chosen randomly and solely by probability (lottery selection). Moreover, probability sampling comprises of several sampling techniques (Dudovskiy, 2022). However, the most suited for the current study goals, in terms of removing "bias from the selection procedure and should result in representative samples" (Gravetter & Forzano, 2011, p. 146), is the simple random sampling. Finally, the reason for implementing simple random sampling is that the short time period allocated to this study does not advocate gathering additional preliminary knowledge of the selected population, as illustrated by Igwenagu (2016) "simple random sampling best suits situations where not much information is available about the population and data collection can be efficiently conducted on randomly distributed items" (p, 34). In the case of the current study, the researcher approached the Master 1 Biology students at Mohamed Khieder University, and invited all the Master 1 students to participate in the study. Consequently, 50 students agreed to represent the Biology Master 1 students. Therefore, all 50 participants are random Master 1 Students who were willing to participate.

1.5. Data Collection Tools

Several methods can be used as data collection tools in NA namely questionnaires, interviews, and observations (Basturkmen, 2010; Long, 2005; Dudley-Evans and St John 1998). However, the current study opted for the suitable method, which can provide a clear distinction of the students' academic English needs in biology. According to Jordan (1997), in terms of large-scale population, the questionnaire is the most efficient tool for data collection. Moreover, Alharbi (2005) conducted a similar study regarding ESP target situation needs analysis on Saudi health professionals in the Saudi hospitals, in which he utilized a questionnaire and highlighted three main reasons of selecting it as the main data collection method. First, the anticipated sample size was large. Second, they only require little amount of time from the participants. Lastly, the students' confidentiality can be assured. Consequently, the present study opted for two questionnaires, which contain open-ended questions, the first questionnaire aims to identifying and locating students' PS needs and the second seeks locating the TS needs or learning needs. In a more specific note, the PS questionnaire consists of two sections; the first section attempts to collect general information's on the sample such as sex, age, first language, medium of instruction, etc. In addition, the second section seeks to pinpoint the students' perspectives of the current English language course's relevancy to their needs in their field. Moreover, TS questionnaire is divided into two sections as well; the first section attempts to explore the target situation necessities of the students in relation to their study skills, then following sections that attempt to gather some future course suggestions based on the students' preferences in the learning process. To investigate the research question and aim, PS questionnaire was first administered to the sample and sufficient amount of time to answer was provided. Subsequently, after one day, TS questionnaire is administered to the same sample population to answer.

1.5.1. Description of the PSA Questionnaire

PSA questionnaire (see appendix 1) constitutes of two sections. First, the first section titled ‘General background’ (from questions 1 to 6), which consisted of demographic variations questions such as; age and gender, as well self-assessment questions were employed such as; the current level in English and proficiency level in language skills. Moreover, the second section titled ‘Current situation’ (from questions 7 to 12), aims to locate students want and lacks as well as their attitudes towards their current English course, in which students where questions such as the relevance of their English course as well as their reaction to statements related to their wants and needs for English.

1.5.2. Description of TSA Questionnaire

TSA questionnaire (see appendix 2) is divided as well into two sections. It is started with the section titled ‘Target Situation and Language Skills’ (from questions 1 to 6), in which the students are asked for the target situation the needs English for, in addition their needs and priorities for English language skills and each need for language subskills were investigated. In addition, the second section titled ‘Future Course Suggestions’ (from questions 1 to 5), in which participants are questioned in terms of their preferences in the teaching-learning process as well their preference in teaching materials in a possible future EAP course.

2. Section Two: Methodological Limitations

The current study encountered some unfortunate limitation along the research path, which affected the current study in several aspects, therefore these unfortunate limitations must be revealed. First, the current study initially intended at conducting a needs analysis as well as designing a potential EAP course for biology students. However, due to the insufficient time as well as the shortage of similar studies, the study was limited to conducting a needs analysis for a potential EAP course design for M1 students of biology.

Moreover, bearing in mind, that researchers should implement various methods of data collection for the validation of his/her study. Unfortunately, due to time restrains as well as the impracticality of conducting observations or interviewing biology specialty English teachers for the reason that Master 1 Biology Students do not take English courses on their second semester of the academic year, thus this study settled for two questionnaires administrated to students as the data collection tool. In addition, the target population is considerably large and rather difficult to locate large portions of them who are willing to allocate the time for answering the questionnaires.

Conclusion

To conclude, this chapter introduced the roadmap for this research's key design decisions. First, the chapter covers the interpretivism philosophy as foundation for the research process. In addition, the research took an inductive nature concerning research approach. Conveniently, this needs analysis survey selected questionnaires as a data collection tool and.

Chapter 4: Data

Analysis and Discussion

Introduction

1. Section One: The Present Situation (PSA) Questionnaire

1.1. Description of PSA Questionnaire

1.2. Analysis and Discussion of PSA Questionnaire

1.2.1. Part One: General Background

1.2.2. Part Two: Current situation

2. Section Two: The Target Situation (TSA) Questionnaire

2.1. Description of TSA Questionnaire

2.2. Analysis and Discussion of TSA Questionnaire

2.2.1. Part one: Target Situation and Language Skills

2.2.2. Part two: Future Course Suggestions

Conclusion

Introduction

The current chapter analyses the data collected from the two questionnaires and attempts to discuss and interpret the gathered information from (50) Master 1 Students of Biology department, who are randomly selected as a sample for this study, which aims to provide answers to the research questions. Thus, the chapter at hand constitutes of two sections; the analysis and discussion of the Present Situation (PS) questionnaire, in addition to the analysis and discussion of Target Situation (TS) questionnaire.

1. Section One: The Present Situation (PSA) Questionnaire

For the sake of identifying the needs of Biology students in terms of PSA and TSA, the current study collects data through two questionnaires. Therefore, this section is devoted for the analysis and discussion of the present situation questionnaire.

1.1. Description of the Questionnaire

The PS questionnaire is divided into two sections. The first section provides a general background of the sample such as age, sex, language of instruction and their proficiency level. The second section attempts to locate the students' perceptions and attitudes towards their current English course as well as the areas of their satisfactions and dissatisfactions in addition to their lacks, wants and necessities.

1.2. Analysis and Discussion of PS Questionnaire

1.2.1. Part One: General Background

Question 1. Gender: Male Female

The analysis of this question provides a view of the informant's gender as shown in **(Figure 6)** which shows that females (33 students) take the large portion of the sample by 66%, as for the male students they were 34% of the total respondents (17) students. To

conclude from the first question of PS questionnaire, Master 1 students of Biology are mainly female students with few male students.

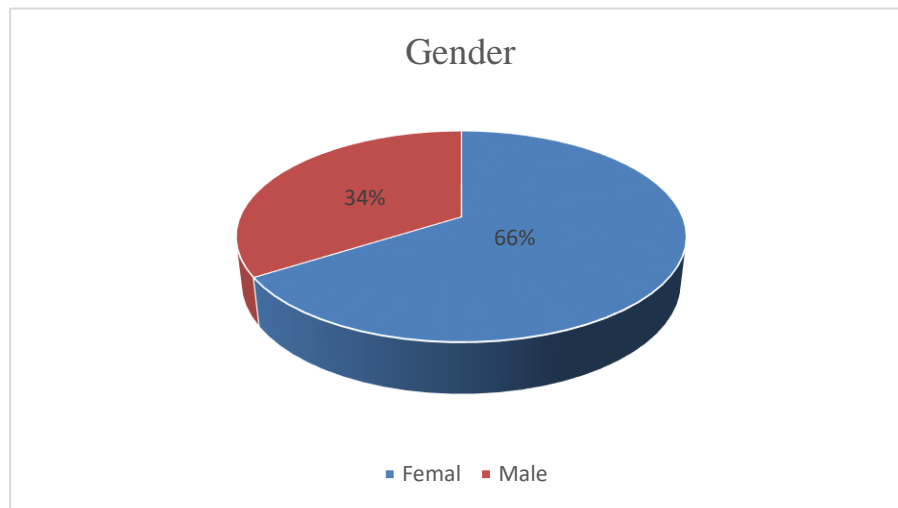


Figure 6. Gender information

Question 2. Age: 19-25 25-30 More than 30.

Analysing the second question reports that the majority of respondents (see **Figure 7**) aged between 19 -25 by 66% of the total 50 students, whereas 26% reported to be in the age of 25_30, and the minority of 8% aged more than 30 years old.

The aim of the past two questions is to gather the demographic information about the respondents to gain an overview about their background characteristics. In addition, asking such demographic questions to respondents allows the researcher to put the collected data into context and better analyse and describe the data of their sample population (Allen, 2017).

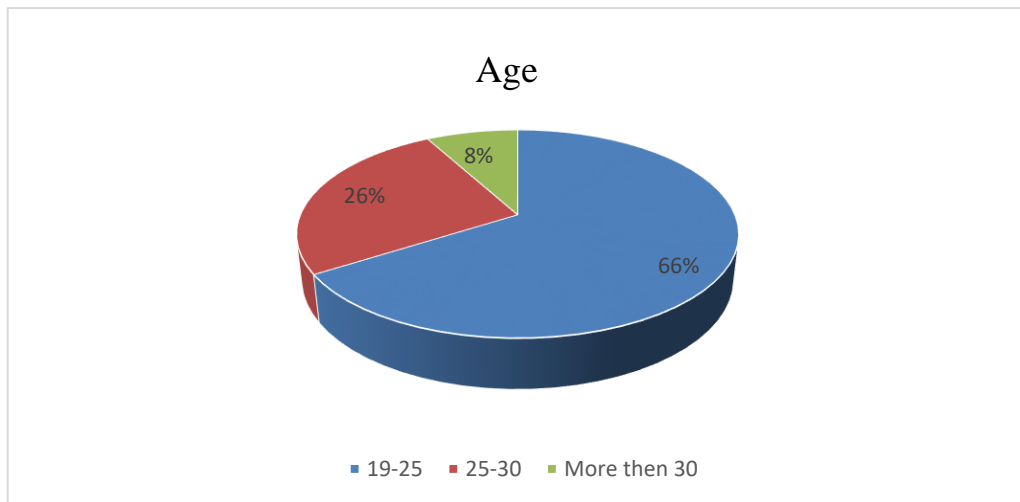


Figure 7. Age Information

Question 3. What is your current medium of instruction?

English Arabic French

Analysis of student's responses on the question about the present medium of instruction concludes that students of Master 1 of Biology department use French language as their daily medium of instruction. Similarly, a Course Design in ESP study conducted by Haddam (2015) in which her study sample were Master 1 Biology students at the university of Tlemcen, some of her study findings indicated that the only books available in the Biology department library were published in French. Thus, the French language is the dominant language in the pedagogical field of Biology, which leaves little room for the development of EAP in their field.

Question 4. How do you consider your level of English before the entrance to the university?

- Beginner
- Lower intermediate
- Intermediate
- Upper intermediate
- Advanced

When students were asked to report their level in English language before their entrance to the university in a five-grade scale from beginner to advanced, the results indicate that two equal levels of students were dominant in which they ranged from beginner to intermediate level by 34% (see **Figure 8**). As for the remaining minority of respondents, they ranged between the upper intermediate by 18% and the lower intermediate by 14%. In addition, a total absence of advance level responses among the participants need to be highlighted as well.

The purpose of this question is to involve students' self-assessment, which is seen by Ward Goodbody (1993) as a key component of a sensitization process in which students embrace responsibility for their own learning. Moreover, the analysis of these results permits the interpretation that the majority of Biology students are divided between intermediate level or beginner level students in English language before their entry to the university while the minority of students vary from lower intermediate to upper intermediate. Which indicates that a considerable portion of Master 1 Biology students had relatively proper GE courses in high school.

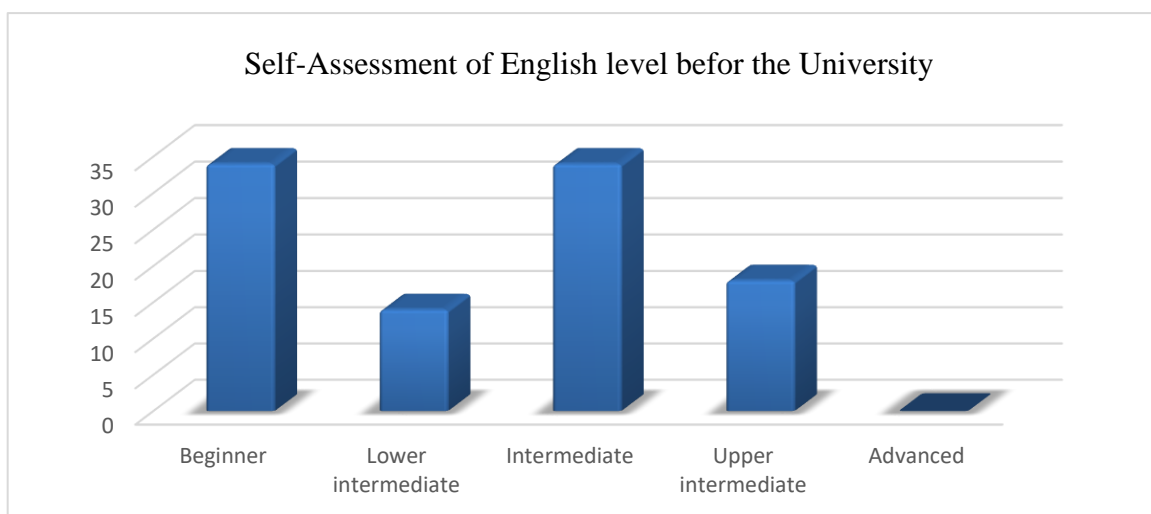


Figure 8. Level of English before the Entry to the University

Question 5. How do you consider your level in English now?

- Beginner
- Lower intermediate
- Intermediate
- Upper intermediate
- Advanced

Regarding this question, respondents were asked to assess their current proficiency level in English language after joining the university, and analysis of the results (see **Figure 9**) reveals that surprisingly the portion of students who had an intermediate level before entering the university had known a slight if not irrelevant increase by 4% to reach 38%. As for the opposite sample, which possess a beginner level by 34%, was split nearly to half. The first half reported to remain as beginner level students by 16%, and the other half were fragmented between enhanced level students that aroused to the upper intermediate level to reach 24% and a clear increase in the number of students who became lower intermediate by 22%.

The results shed the light to the considerable large percentage of students whose self-assessments barely changed after the university entrance as well as the minority that reported to have a more dissatisfactory level in English than they were before entering the university. Such remarks promote a perspective that most students are not receiving any form of feedback from their English course teachers regarding their efficiency level. In the same vein, Blue (1994) conducted a study on university students' self-assessment in foreign language program learning at the University of Southampton (England) in EAP classrooms in which he advocates that "Students who constantly receive positive comments on their performance will tend to develop a positive view of their language level and to assess themselves accordingly"(Pp. 31-32). To conclude, students of Master 1 Biology are in need of positive

reinforcements from their English course teacher to upgrade their level of proficiency in English.

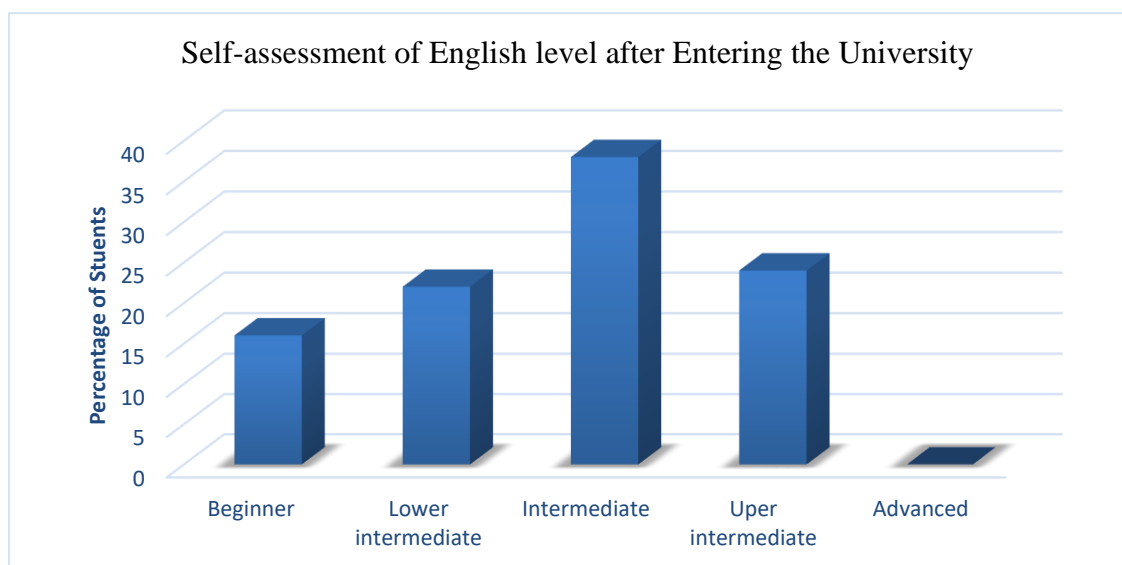


Figure 9. Level of English after the Entry to the University

Question 6. How is your current English language skill level?

- Listening: Advanced Intermediate Low
- Speaking: Advanced Intermediate Low
- Reading: Advanced Intermediate Low
- Writing: Advanced Intermediate Low

Students were asked to evaluate their current level in the four macro-skills of the English language in the scale from ‘low’ to ‘advanced’. In other words, Jordan (1997) believes that asking students to assess themselves in terms of completing certain forms by ticking the appropriate answer related to them is “A straightforward way” of self-assessment. Consequently, (Figure 10 below) shows that the majority of students (26 to 31 students) felt they have an average level in the four skills. However, a minority of students (not more 10 students) allocated themselves ranging between low or advanced. Nevertheless, a slightly increased portion of students (13 to 17 students) is remarked to have low levels in the speaking skill and more advanced levels in listening and reading.

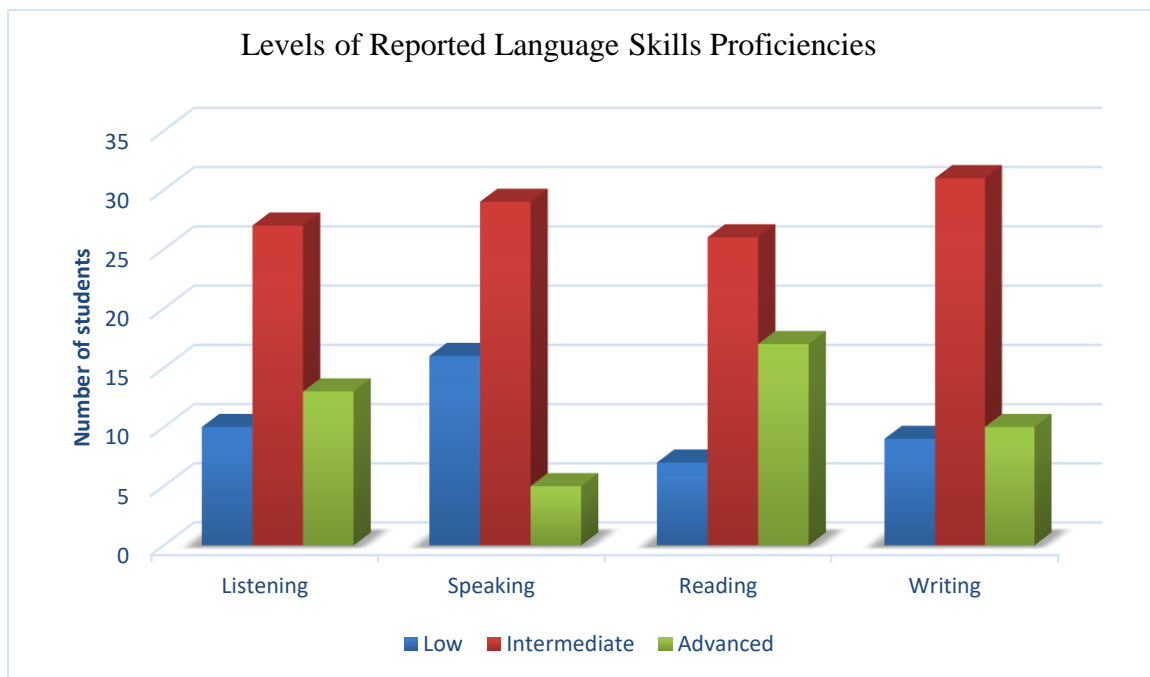


Figure 10. Students' Level in Language Skills

Similarly, Needs analysis surveys conducted by (Abdullah 2009; Haddam (2015), in which they asked the students to self-assess their present language skills did arrive to similar remarks, that majority of the respondents believed they were as good as others. Whereas, a respective minority believed they were either more or less proficient. In addition, since the majority of students have selected the intermediate choice in all of the designated skills, it suggests the possibility of most students' lack of knowledgeability to self-assess themselves accurately in terms of language skills. To clarify, Blue (1994) argued that self-assessment process "will be a new concept to many international students and they may simply need more practice before they learn how to evaluate their level of language proficiency more accurately" (p. 31). Moreover, the number of students who reported to possess a low level or an advanced level are more likely to be a more self-aware portion of the students. Thus, Master 1 students of Biology department are only taking courses, which aim to improve the receptive skills i.e. reading skill and listening skill on the expense of the two productive skills i.e. speaking and

writing. Alternatively, similar study conducted by Hyland (1997), revealed that the languages obstacles that learners had, were connected to their productive skills of writing and speaking.

1.2.2. Part Two: Current situation

Question 7. Do you think that the English course in your department is related to your needs in English?

a. Yes

b. No

c. To some extent

Analysis of this question reports that a leading majority of 48% of students (see **Figure 11**) who believes that their current English course in their department is not suitable for their needs in learning the English language. In addition, a considerable portion of 32% of students believed their English course is related to their needs only to some extent. However, there remains 20% of students, who believed the English course to be suitable for their needs in English.

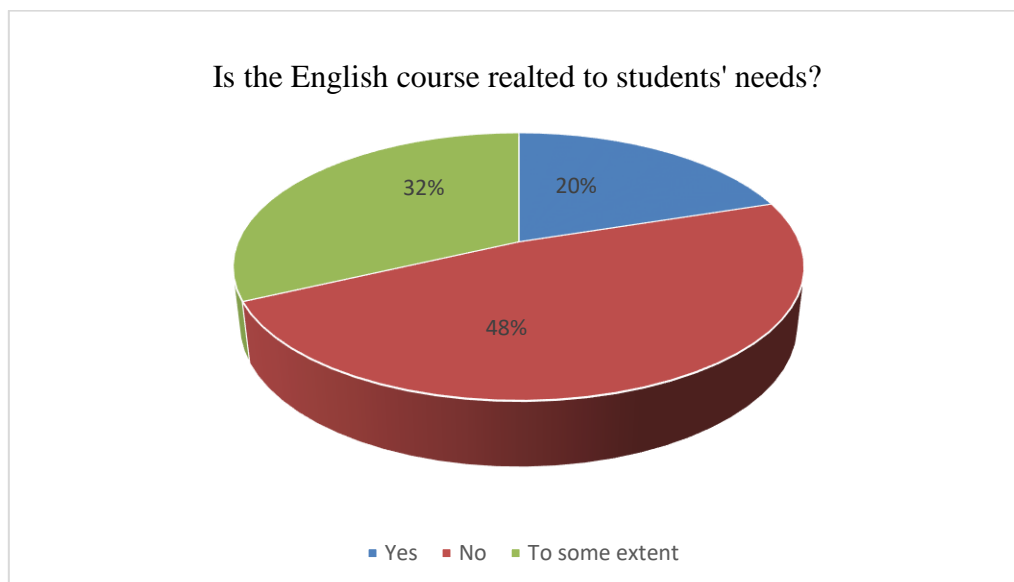


Figure 11. Students' Opinions on their Course in Relation to their Needs

The results from the analysis of students' dissatisfaction towards their current English course indicate that most students of Master 1 Biology department are aware of their need to learn the English language, and they are unsatisfied with the English course provided by their department. In correspondence, with the conclusion of Elsaid Mohammed and Nur (2018), that university students appear to be self-aware of their need for English language skills. Moreover, this interpretation aligns with the result of many distinguished studies such as (Amirian & Tavakoli, 2009; Moattarian & Tahririan, 2014; Malouki, 2016), who concluded that the preceding courses attended by the students were unproductive in term of fulfilling their needs and further developments are needed on syllabus design, material selection, and instructor selection. However, smaller percentages of participant declared their English course to be related directly or to some extent to their English needs in Biology field, implying that there remains some students are unaware of their needs in English and do not know the objectives of their courses.

Question 8. Do you think one-hour session per week is sufficient to learn English?

Yes

No

If no, how many sessions do you think are sufficient?

Students were asked to state whether a one hour per week is sufficient or not to learn EAP in Biology department and they were asked to provide a rather appropriate number of sessions per week to learn English properly. To illustrate more, (see **Figure 12**) the results shows that a vast majority of 76% students believe that a one hour is not adequate to learn English but there is a minority of 24% students who disagree with the leading majority and said it was appropriate to have a one-hour course.

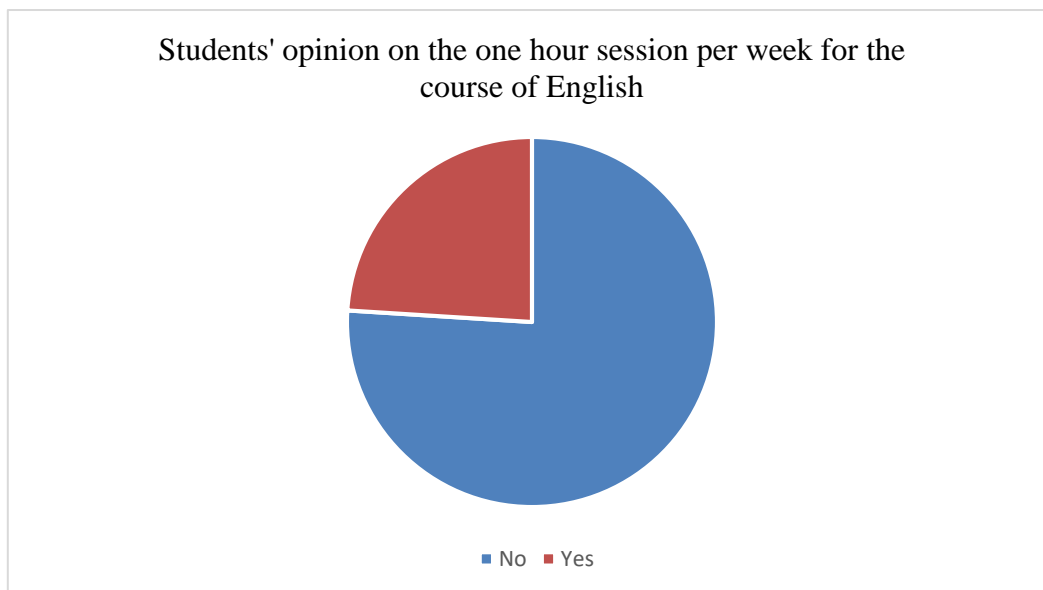


Figure 12. Students' Opinions on the Appropriateness of Time Allocated to English Courses

Analysis of this question indicates that the majority of students are willing to have even longer time allocated to learn English, which in turn indicates their motivation to learn the English language (which will be further discussed in Question 9-a). Moreover, when students were asked to provide the appropriate amount of sessions for them, nearly all of the students agreed on 3 sessions per week as to be convenient to learn English (as shown in **Figure 13**). Such results, correlates to the findings of (Henerby, 1997; Haddam, 2015; Ounis, 2018), who concluded that one hour per week is not enough for students to fully comprehend the lesson. However, a registered minority of 10 students had different opinions of either lesser than 3 session or unrealistic number of session over than 4 sessions per week. This minority of students can be presumably regarded as irrelevant, non-motivated and unserious portion of participants. Consequently, reducing the session from one hour and a half to one hour per week in the line of the pandemic precautionary measures only made it more difficult for students to comprehend the materials provided by the English teacher. For argument's sake, "The reduced hours are one of the main issues faced by an ESP teacher since it can affect his role as an evaluator and as a

course designer” (Haddam, 2015). Therefore, there is a total agreement on the insufficiency of the current allocated time to English courses for Biology department Master 1 students.

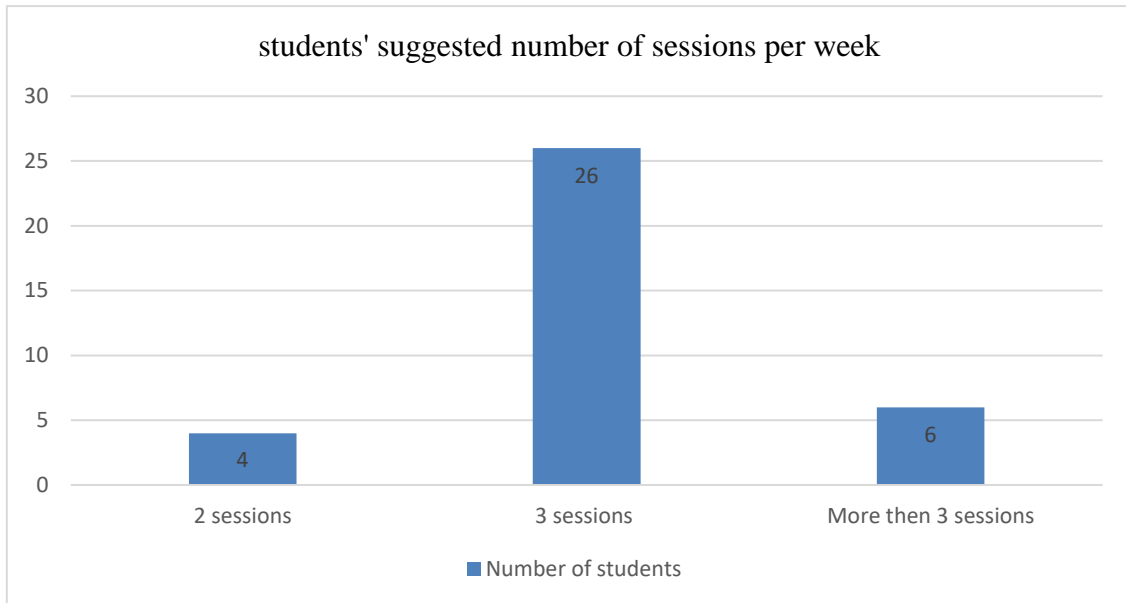


Figure 13. The students’ Opinions on the Appropriate Number of English Sessions

Question 9. For this question, please choose a number from 1-5 to indicate how much you agree or disagree with each statement and write the number next to the statements.

Extremely disagree

Strongly disagree

1	2	3	4	5
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This question aims to pinpoint the academic needs and wants of Master 1 Biology Student, where the participant were asked for their attitudes towards the following statements:

Statement a) I want to learn English.

The analysis of the participants’ answers indicates that heavy portions of 37 students (see **Figure 14**) strongly motivated to learn English. While, six students felt less motivated to learn English. However, five student chose to stay neutral to this statement, and

only two students who were not enthusiastic to learn English. Therefore, in addressing the importance of student's motivation to learn English in an EAP course, Jordan (1997) stated that motivation "indicates the inseparability of the cognitive and affective sides of the learner' as it is initiated by the learner first wanting to think about learning something" (p. 10). Moreover, many studies which emphasized the importance of students' motivation and arrived to the same conclusion as the current study such as (Moattarian and Tahririan, 2014; Abdullah, 2009; Haddam, 2015; Malouki, 2016), this studies have similarly reached the conclusion that university students are enthusiastic to learn English.

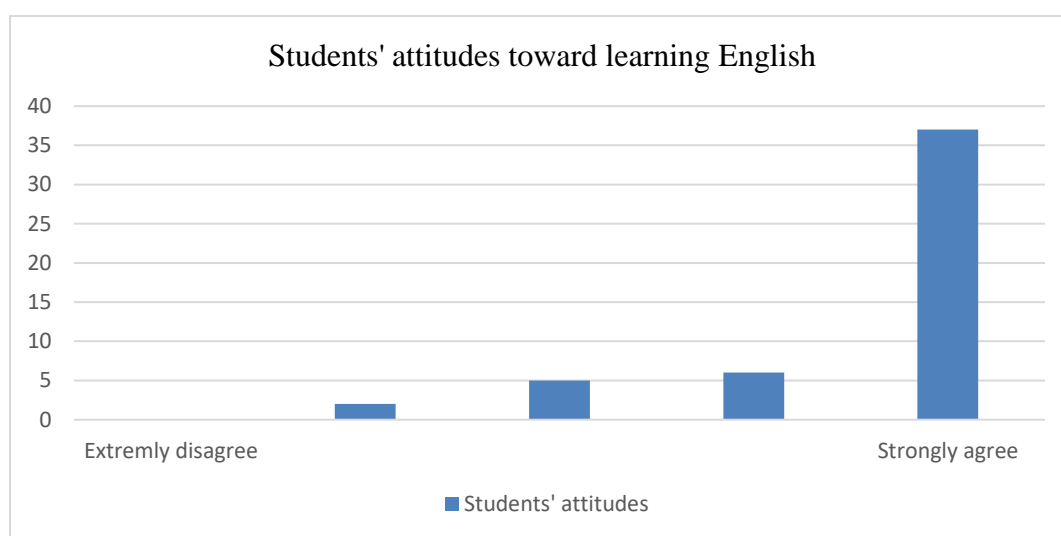


Figure 14. Enthusiasm of Students of Biology towards English Learning

Statement b) English module is given a high coefficient in my department.

Students have clearly disagreed with the notion that biology department allocated a high coefficient for English module, since a vast majority of 78% students extremely disagreed with this statement, and only a minority of 22 % of student who thought that the allocated coefficient is more than enough for English module. Such statements indicate that English module is not considered an essential module by the biology department administration due to the French language dominance in the Algerian Science and Technology departments. Similarly, such

conclusion is similar to the findings of (Haddam, 2015; Ounis 2018; Bouderba and Yahiaoui, 2020) who highlighted the dominance of French language over the scientific departments in the Algerian universities and the disregarding of English until this day.

Statement c) Having a good English level will help me in my studies.

Participants clearly demonstrated their need of a good English level in their studies, for a majority of 72% students ranged from agreeing and strongly agreeing that English is needed in their field. However, the minority of 28 % ranged divided to 22 % who were neutral to the statement and 6 % students who negatively disagreed with the statement. Therefore, it is adequate to say that Master 1 students of Biology department are in need for English in their tertiary studies, which corresponds with the study conducted by Bouguenous (2018) who conducted a similar study on ‘The Need for Teaching Effective ESP Courses for Medical Students in Algeria’ and arrived to the same conclusion that student of scientific departments are in need for English in their studies.

Statement d) Having a good English level will help me to find a job.

New revelations were provided by the participants once asked whether having a good English level will aid them hunt for a professional career. Indeed, a significant portion of 62% respondents (see **Figure 15**) positively agreed with the statement, where 48% of them strongly agreed and only a 14% simply agreed. In addition, smaller portions of 26% students were not sure on their attitude towards the statement, whereas a minority of 12% population ranged from extremely agreeing and slightly agreeing. Consequently, these results confirm the findings of statement c) above. In addition, Students are adults and are aware enough to realize the impact of the English language on the professional occupation field, where English is considered as an important job requirement mainly in the scientific field. Hence, one of the target students’ wants are to develop competencies and increase the possibility of getting a job.

This interpretation aligns with the studies of (Bouguenous, 2018; Moattarian and Tahririan, 2014) in which they concluded that students need English for various situations in their search for professional career.

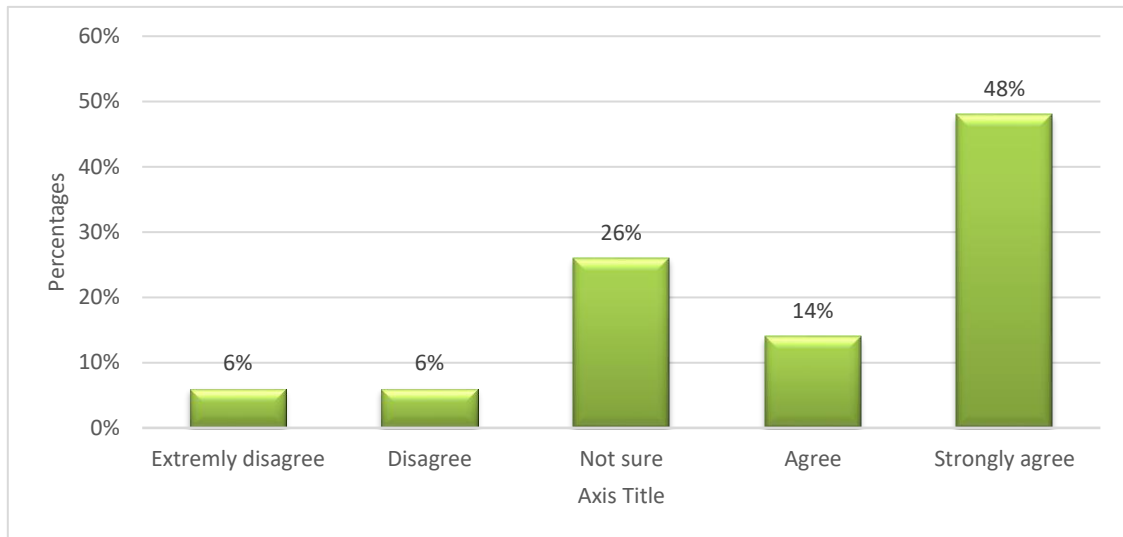


Figure 15. Students' Attitude towards Having a Good English Level to Find a Job

Statement e) I use English printed documentations in my field.

Surprisingly, the analysis of students' responses indicated that respondents were either not sure or negatively disagree with the fact of using English printed documents in Biology field, for they registered a significant portion of 52% students who disagreed and only a minority of 18% students who agreed with the statement. However, 30% of students were uncertain about the statement, which can be interpreted that these students misinterpreted the question to using English printed documentation in the English module in their department. Nevertheless, the majority of students who denied the usage of English printed document can be traced back to the fact that majority of respondents ranged between intermediates and beginners in terms of their level in English language, therefore it would not be productive for Biology specialist teachers to include English printed documents in their teaching materials. In

addition, the dominance of French language plays a significance role in the overlooking of English printed documents.

Unfortunately, such remark on the Biology department of Biskra University goes against the viewpoint of many researchers such as Tardy (2004) who called English 'EILS' (English as an international language of science). Thus, neglecting the lingua franca of sciences nowadays is considered a setback to true development for Biology studies in Algeria.

Statement f) I want to speak English fluently.

Figure 16 below describes respondent's attitudes towards the want to speak a fluent English in which a vast majority of 80% student strongly agreed and another 8% who simply agreed. Nevertheless, a small group of 10% students were not sure about their opinion and only 2% students who negatively disagreed with the statement.

Therefore, a conclusion is drawn from the following registered attitudes that Master 1 Biology students of Mohamed Khider University believe that they are not taught how to better develop their speaking skill and pronunciation of the language properly in their current English course, as "A language course should provide activities aimed at increasing the fluency with which learners can use the language they already know, both receptively and productively" (Nation & Macalister, 2010) , which confirms the findings of (Question 6 above). In the same vein, Indrasari (2016) who conducted a needs analysis on physics students, and his study concludes that majority of students expressed their pressing need to learn the speaking skill, which correlates with the findings of the current study. Moreover, students who want to be fluent speakers of the language can be hindered from many obstacles, such as the factors provided by Leong and Ahmadi (2017). First, inhibition (beign ashame of making mistakes in front of classmates). Second, lack of topical knowledge i.e. not knowing enough about the topic at hand to express themselves in English. Thirdly, the low rate of participation in calssroom can

be an obstacle that leads to lack of practicing the language. The final obstacle they provided, is ‘the mother tongue use’, for students of the same mother tongue may feel more at ease and comfortable in communicating with their mother tongue in the classroom, which disrupts the development of their speaking skill.

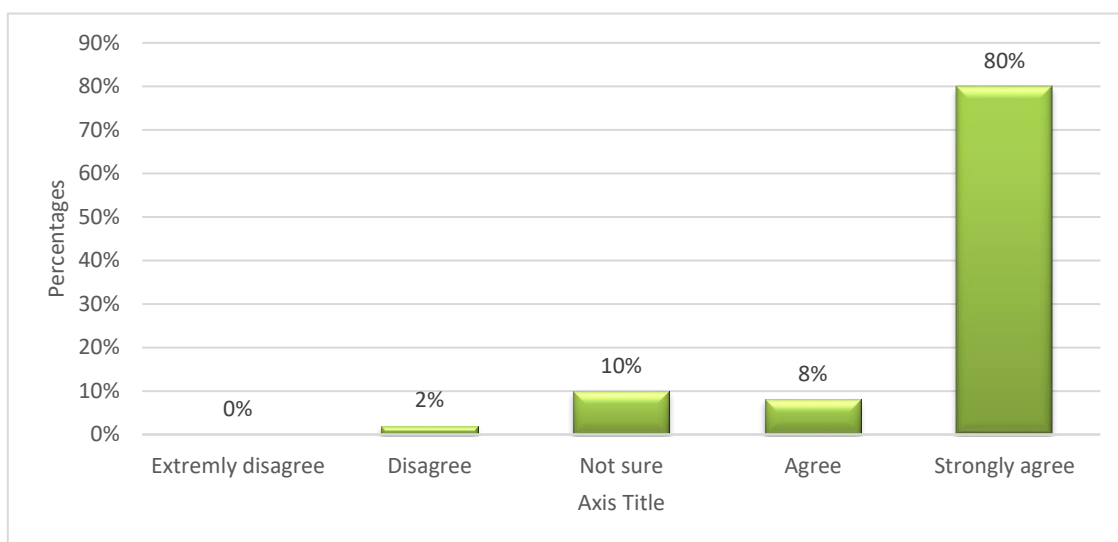


Figure 16. Students’ Attitudes towards the Want to Speak English Fluently

Statement g) I want to listen to English lectures in Biology and understand them.

The results (see **Figure 17**) represents a significant portion of 54% students who strongly agreed to the desire of listening to biology lectures in English and understanding them and another 18% students who simply agreed with the statement. Nevertheless, another 18% students were uncertain about the statement, in addition to the minority of only 5% who were not enthusiastic to listen to their field-related lectures in English and understand them. These results are no more conclusive than those of earlier studies which remarked the weaknesses of University students regarding the listening skills such as the study of Flowerdew & Miller (1995) who conducted a three-year ethnographic study of academic lectures at a Hong Kong

university, in which they remarked the participant students' weakness in the listening skill among those attending the English lectures.

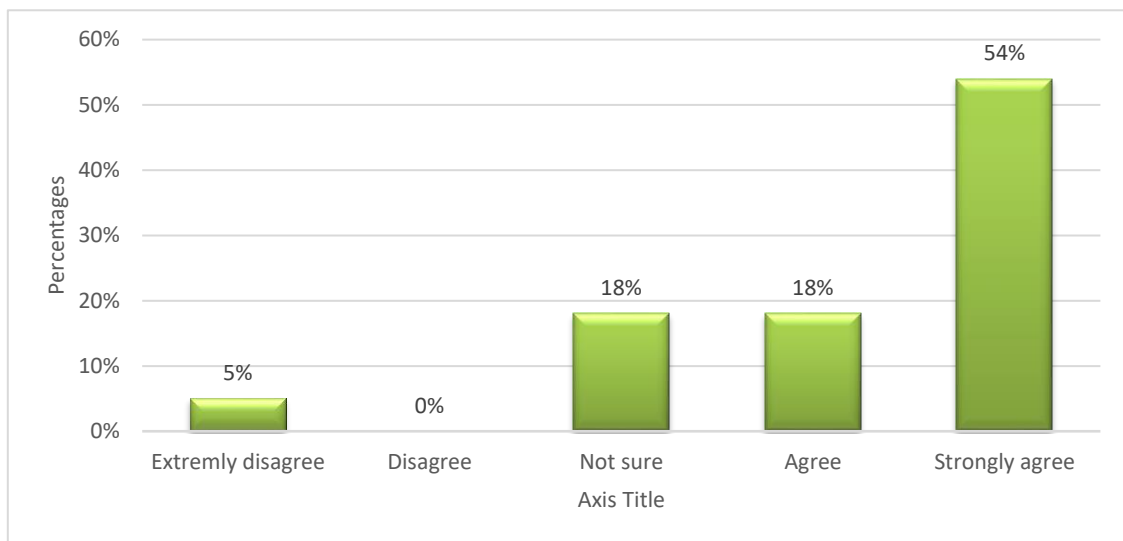


Figure 17. Students' Attitudes towards Listening and understanding English Lectures

Statement h) I want to be able to write lab reports or research papers in English.

As far as the (**Figure 18**) is concerned, a majority of 60% strongly agreed and 14% students simply agreed to the desire of being able to write lab reports or research papers in English. Moreover, 16% of students were not sure of their stand regarding this statement. Nevertheless, a minority of 8% in total did not want to write laboratory reports or research papers in English and another 2% simply denied such desire.

The analysis of these results indicates that Master 1 Biology students are required to right laboratory reports or research papers in English at a certain point in their academic career such as in their post-graduation. Thus, students have shown an awareness and maturity to the new globalized academic community of the modern day, in which research papers and articles not written in English are less read and cited, yet articles and research papers written in English have a significantly larger impact on the scientific field (Vinther & Rosenberg, 2012).

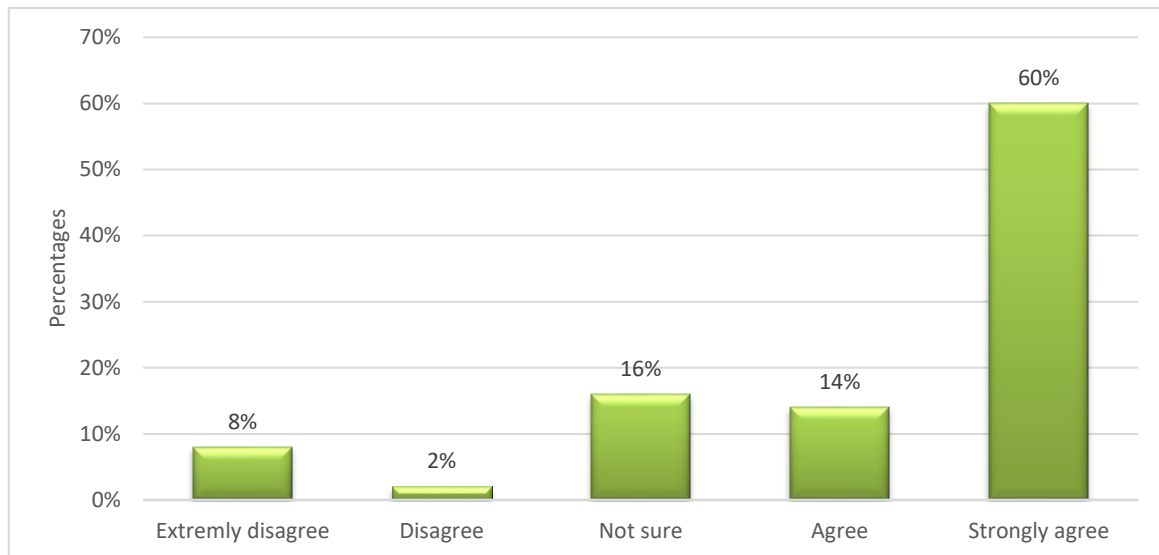


Figure 18. Students' Attitudes towards writing Lab Reports or Research Papers in English

Statement i) I want to read English publication in my specialty and understand them.

Students were asked for their opinion on the statement, in which they showed a majority of 66% and 18% students who extremely agreed and simply agreed in order. Meanwhile, 12% of students remained neutral on this statement, and only a thin minority of 4% of students who had a negative stand towards the statement and ranged from extremely disagreeing and simply agreeing. Therefore, the analysis of the results represents an agreement by the majority of Master 1 students that their current English course does not aim for developing the students' reading skills as similarly concluded by (Haddam, 2015; Malouki, 2016). Moreover, thousands of researchers worldwide are publishing and discussing articles in Parasitology, Immunology, and Microbiology, and Neuroscience, which are written in English (Yegros-Yegros, Rafols, Abad-Garcia, Mugnaini & Meijer, 2016). As a result, according to Coelho, Canepa, Arora, & Duffy (2019) in order for post-graduate students to remain briefed and up to date in their academic field, students must read publications in high-impact journals. Consequently, the students' expressed opinion of the current statement is more of a need than a want.

Statement j) I want to be able to translate biology-related scientific document (reports, books, articles).

Results in (**Figure 19**) indicate that significant percentage of students agreed with the statement by 62% who strongly agreed and 14% simply agreed. In addition, small portion of students chose to not express an opinion towards the statement. However, small proportion of 6% of students had denied the statement and only 2% students who simply disagreed. Consequently, such analysis is interpreted as Master 1 Biology students being aware of their need to translate certain documentations such as reports, books and articles, which are related to Biology field and are written in English. In the same vein, Coelho, Canepa, Arora, and Duffy, (2019) stressed the notion that instead of reading manuscripts in their original English, students often use translation tools to read articles in their first language. Moreover, Flowerdew's (2008) concluded a similar remark that confirms the findings of the current research, which asserts that due to the lack of resources or education, it is sometimes impossible for students to read and comprehend an article in English in third world countries.

Statement k) I want to learn English to pass exams.

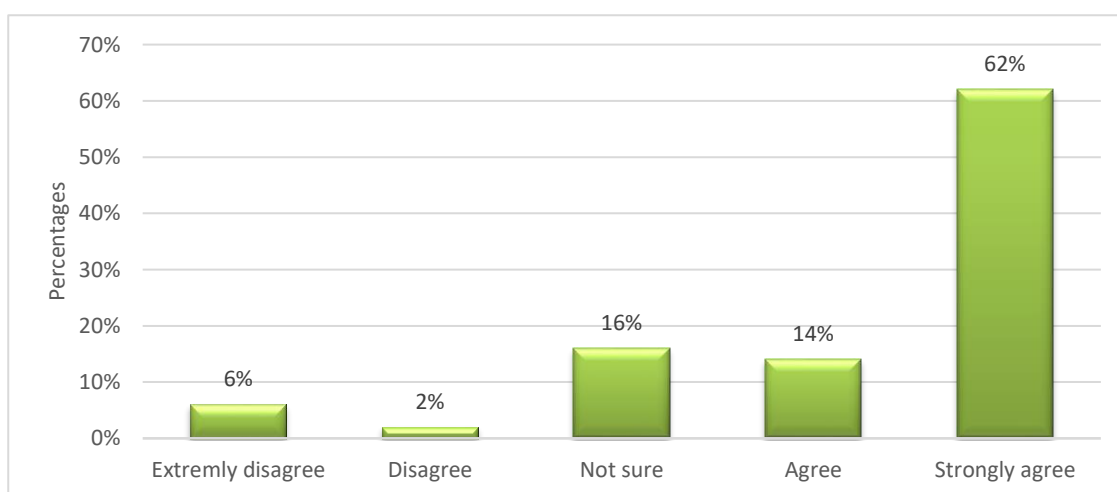


Figure 19. Students' Attitudes towards Translating Biology-Related Scientific Document

When students were asked for their attitude about whether they desire to learn English as only a means to an end, which is to pass the exams. Therefore, as far as (Figure 20) goes, over half of students by 56% are noticed to strongly agree and additional 16% who simply agreed. Nevertheless, another 16% of students reported a neutral stand over the statement, in addition to a minority of 6% who disagreed and another 6% had a stronger negative opinion toward the statement. Overall, the analysis of results confirms that students' purpose for learning English is merely an academic one. In the same vein, an EAP needs of students of knowledge and information science in an Iranian university' study was conducted by Gaskaree (2020), in which the study concluded that the majority of students are in need for English to take class examination, in other words; they need it for their academic studies rather than performing an occupation or a profession.

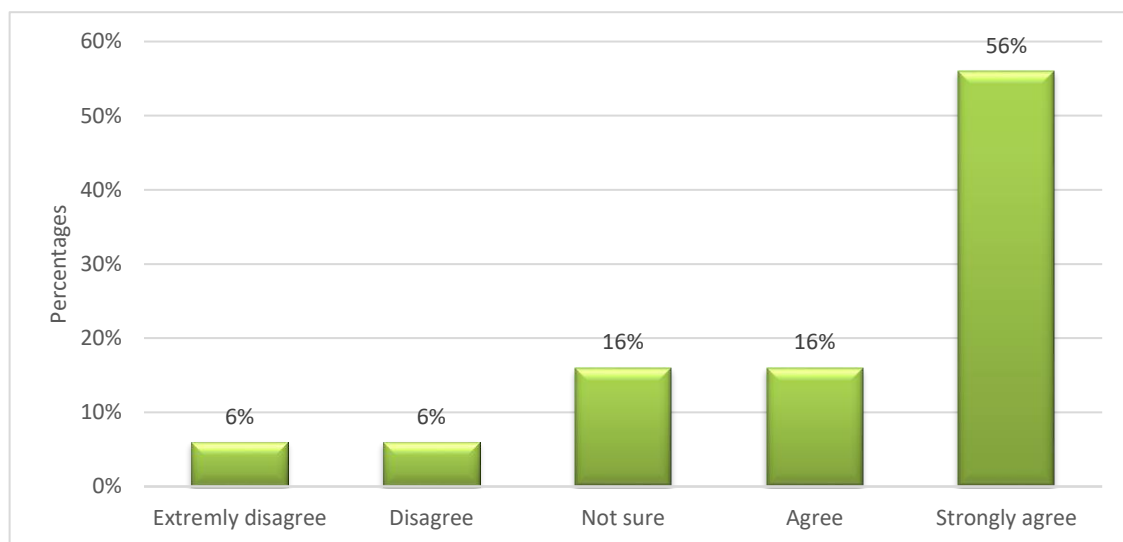


Figure 20. Students' Attitudes towards the Want to learn English to pass exams

Question 10. Your current English courses emphasize on:

- The listening and speaking skills.
- The reading and writing skills.
- The vocabulary and grammar.
- The Terminology and translation.
- Other (specify).....

The results indicate, that when students were asked on what their current English course in Biology department emphasized, the large portion of students (46%) said that their current English course focused on terminology and translation. Moreover, 42% of students claimed that their English course focuses on the listening and writing skills. On the other hand, considerable percentage of 38% students reported their English course emphasized more on the reading and writing skills. Finally, only a minority of 24% of students who believed their English course emphasized on vocabulary and grammar, but there was one students who commented in the 'other' optional answer and said that their English course simply utilized texts and questions with no benefit what so ever.

Ultimately, the analysis of such results prompts the interpretation that English course for Master 1 Biology students at Biskra University, Algeria, focused mainly on terminology and translation, which corresponds with the findings of Haddam (2015). Additionally, EAP syllabus in Biology department tends to include some diversified language aspects, as it addresses terminology and translation, listening and speaking skills as well as reading and writing skills and along with fewer lectures, which address vocabulary and grammar. Consequently, student are not taught properly grammar and vocabulary which they need for their efficient development of the productive skills, due to low qualification and training of the English teachers in EAP contexts. As concluded by Hyland and Hamp-Lyons (2002), that EAP teachers are usually hired as substitute short-term instructors, which do not possess the adequate requirement to teach EAP classes. Accordingly, Long (2005) have asserted that EAP teachers do not possess the professional qualifications to deal with basic commonalities of an EAP classes.

Question 11. According to your opinion, where do u think you lack English?

For the sake of locating the students' lacks, they were asked what they lack in English. The (**Figure 21**) below describes the various skills in which students think they are

week at. Indeed, more than half of respondents agreed on their weaknesses in communication and speaking which confirms the findings of (**Question 6** and **Question 9-f**) as well as Haddam's (2015) study in which she confirmed that speaking and communication are seen as the major weaknesses to Master 1 Biology students. Moreover, such results correlates to Littlewood and Liu's (1996) opinion that lecturers usually regard speaking often quite insignificant skills. The second most regarded weakness amongst students were translation with 46%, which aligns with Gaskaree's (2020) study, that concluded EAP students are lacking in translating technical texts. Another slightly less significant shared agreement amongst students, is facing difficulties in Grammar (40%), vocabulary(38%) and pronunciation (32%) that correlates with Esfandiari's (2015) belief that EAP teachers ought to " design relevant tasks to tap into the knowledge of vocabulary, grammar, and translation" (p. 55), and better develop students's communicative competence. To conclude, students reported having a good level in listening by 28%, writing by 28% and slightly better level in reading with only 16% of students who faced difficulties at.

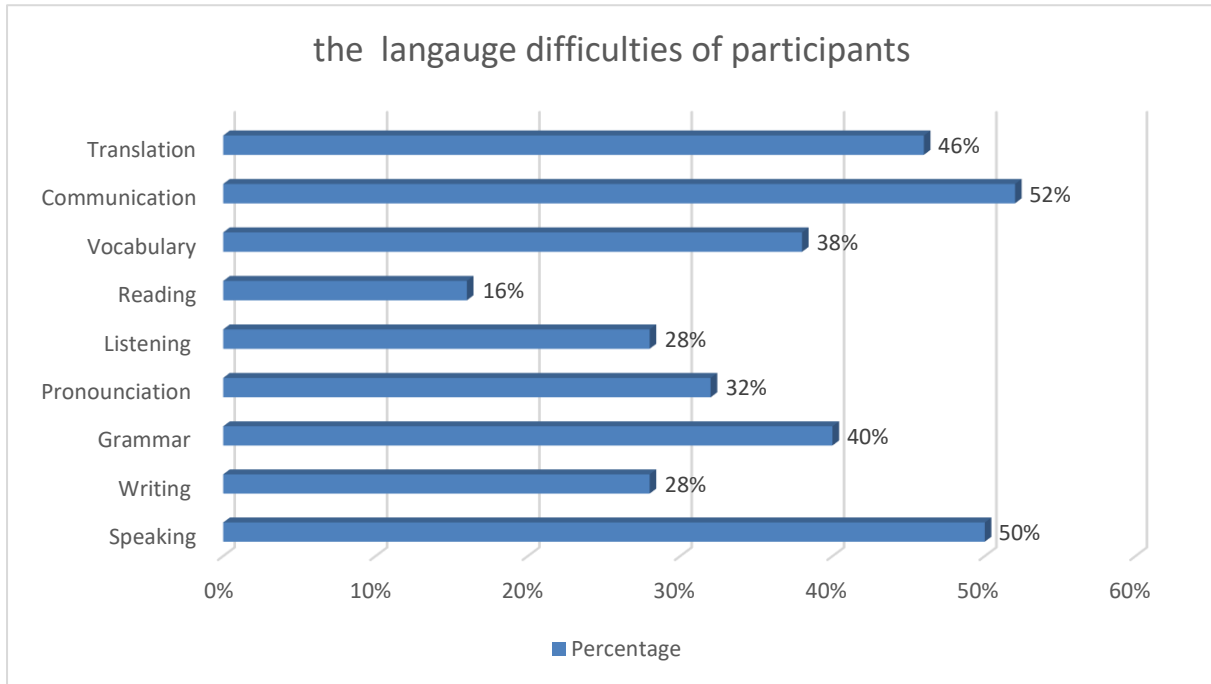


Figure 21. Students' Reported Language Lacks

Question 12. If you have any other difficulties in your English language, please illustrate

For a final concluding question of PS questionnaire, students were asked to provide any other difficulties in their English language if found. Surprisingly, most of those who reported further problems in English had similar answers namely: لا أجد مع من اتواصل (I cannot find someone to communicate with), لا استطيع استخدام الانجليزية عندما أذهب الى المنزل (I cannot use English once I go home). Conveniently, such statements correspond with the findings of James (2010) which conclude that EAP courses are exclusively lacking the positive 'transfer climate', that is; the adequate atmosphere for supporting learning transfer, for the lack of opportunities to practice the taught language outside of the classroom, which is considered by Gaskaree (2020) as the most pressing issue to EAP learners.

2. Section Two: Target Situation Analysis (TSA) Questionnaire

As the second mean of data collection for the current study, TSA questionnaire is administered to the participants separately and in second to the PSA questionnaire. This section is devoted for the analysis and discussion of the TSA questionnaire.

2.1. Description of the Questionnaire

Similar to the Present Situation questionnaire, the TS questionnaire is also divided into two sections. First, the leading section tackles the students' target situation as well as the four language skills and their sub-skills. Moreover, the second section provides the characteristics and preferences of students for their learning processes and teaching materials for a potential EAP course.

2.2. Analysis and Discussion of TS Questionnaire

2.2.1. Part One: Target Situation and Language Skills

Question 1. What are the areas in which you think you need English?

Students were asked to state their interest in learning English, and they were provided with three choices to select those that correspond to their situation. Therefore, results presented in **(Figure 22)** indicate a significant percentage of 67% of students who shared the belief that they need English language in their future professions, which aligns with the findings of **(Question 9-d)** that affirms students' awareness of their need for learning English to find a suitable profession in which the usage of English is required. Moreover, a 40% of students as well reported their interest in learning English for their post-graduate studies. Surprisingly, 36% of students respectively, reported they need English for everyday life, though English is not commonly used in everyday life in Algeria, therefore it is considered as a want other than a need for Master 1 students of Biology. As was concluded by Elsaid Mohammed and Nur (2018),

that EAP students tend to report their need to use English in their social life, even in countries who are not accustomed to using English as a daily language.

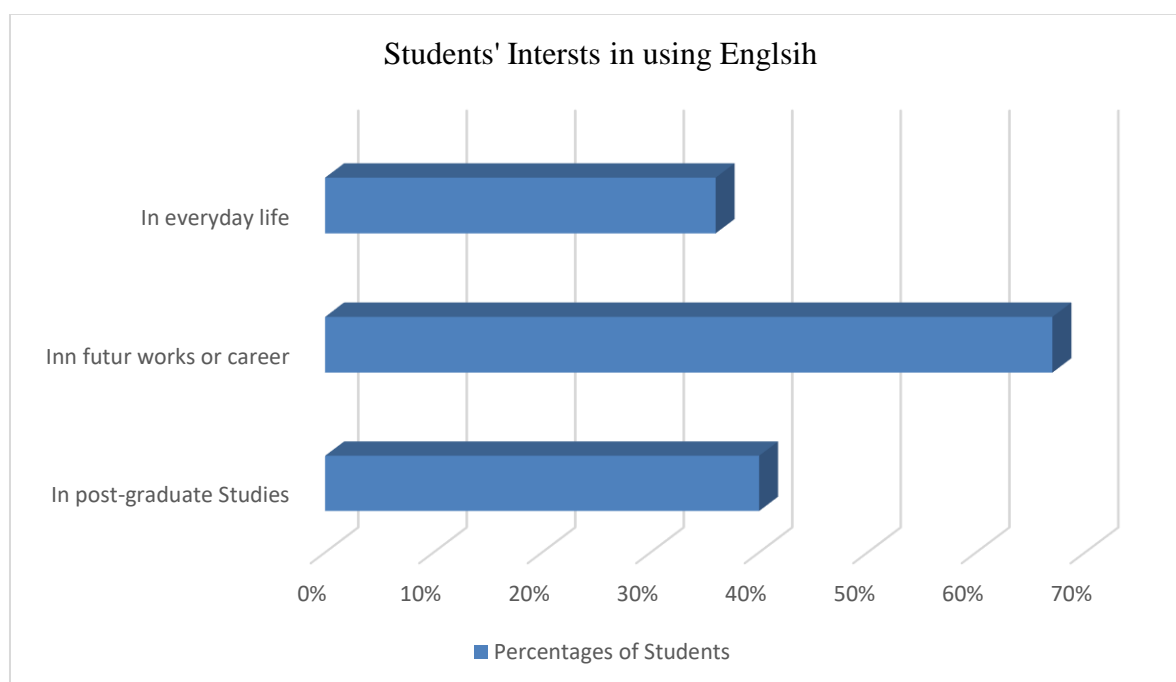


Figure 22. The Areas in Which Students Think They Need English at

Question 2. Classify the four language skills according to your needs.

While analyzing students' classification of the four language skills, it is noted that (See **Figure 23**) the majority of students agreed on speaking and listening as their most deemed skills, then reading and writing came second in place, which confirms the findings of PS questionnaire of students' 'want' to improve their speaking and communication skills. In addition, students have expressed a high demand for the speaking skill, even though it is not immediately required of them in their academic studies. Although, students are not crucially demanded yet to operate their speaking skill in their academic studies, yet they believe it is their most crucial need for English learning, which was confirmed as well by Robinson (1991) that speaking skills are often conceived as a mean to assess student's proficiency in a language. Meanwhile, the fact that students place writing as the least needed skill, suggests that Master 1

Biology students are not introduced to academic writing in English and their compulsory need for in writing formal research papers, article, Emails, etc.. In the same vein, Hyland (2006) noted in his article that “writing in the disciplines is frequently looked down upon as simply an exercise” (p. 35). Therefore, Master 1 Biology students are in urgent need for academic writing tutorials.

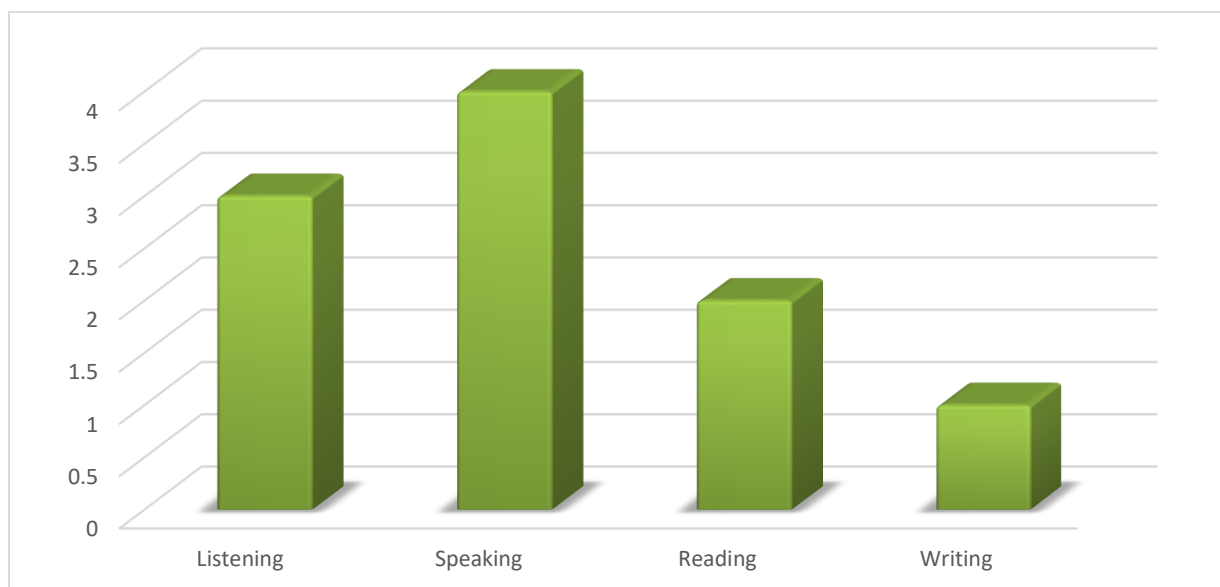


Figure 23. The Students’ Classification of Language Skills

Question 3. What reading skills do you need to improve?

In pursuit of students’ target situation needs, participants were asked what specific reading sub-skill/skills that they need along their academic studies. As such, the results reveal that Biology participants viewed all reading sub-skills to be of value to their academic study. However, (**Figure 24** below) indicates that students have shown that they prioritized some sub-skill over others, in which reading foreign laboratory reports in English and reading professional articles in the field of biology in English are of high priority to more than half of students. Meanwhile, reading instructions on laboratory devices came in second in term of value to students’ academic success, as for reading Biology websites on the internet it was perceived as

the least significant reading sub-skill to Biology Master Students. Consequently, the analysis of these results indicates that Master 1 students of Biology at the University of Biskra are not provided with the appropriate amount or type of reading published materials and reading activities related to their field and their target needs. In accordance with Gaskaree's (2020) study on EAP needs analysis for students of knowledge and information science In Iranian universities, in which the result concluded student's target needs to read subject-specific published materials in English. Ultimately, student's urgent need for reading English written published work in Biology field is a note to be considered in designing an EAP course for Master 1 Biology department students.

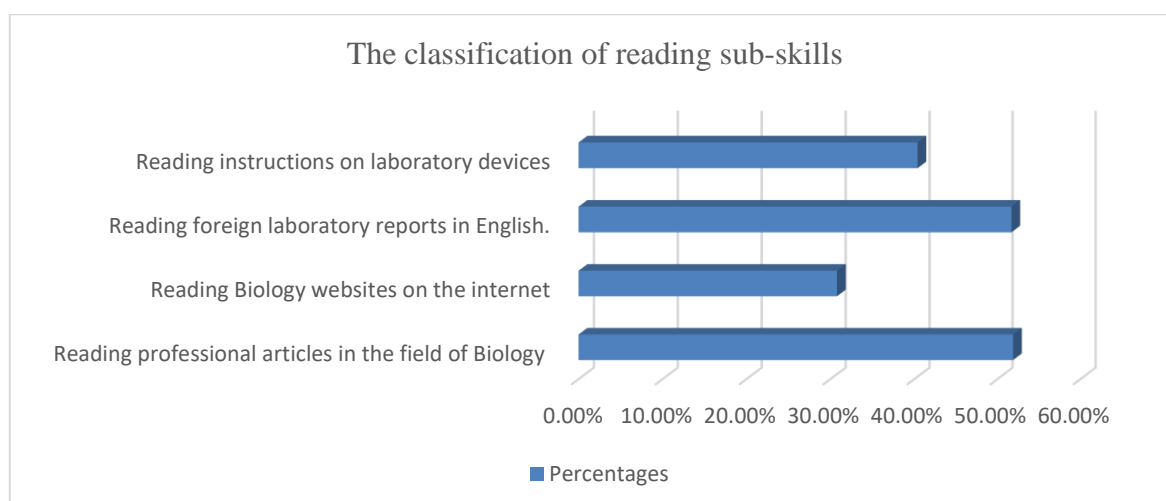


Figure 24. Students' Need for the Reading Sub-Skills

Question 4. What listening skills do you need to improve?

Concerning listening sub-skills, the result presented in (Figure 25) indicates that students have recognized all listening skills to be of relevance to their need. Nevertheless, they have not hesitated to demonstrate their tendency towards some sub-skills. In accordance, large equal percentages of participants (55%) agreed on their urgent need for listening and understanding English speech as well as understanding English lectures in their field. Whereas, understanding Biology-related lectures presented in English, and picking up the main ideas are

not considered essential for many students as the other listening sub-fields. An interpretation of the results indicates that, students are in high need for listening material and activities of native English. Similar needs analysis conducted by Chan and Ham (2007) on fourteen undergraduate EAP students in which they concluded that students are on high need for improving their general listening as well as listening to lectures presented by native speakers. Hence, listening activities and the extensive exposure to English language are target needs for the sample of the current study.

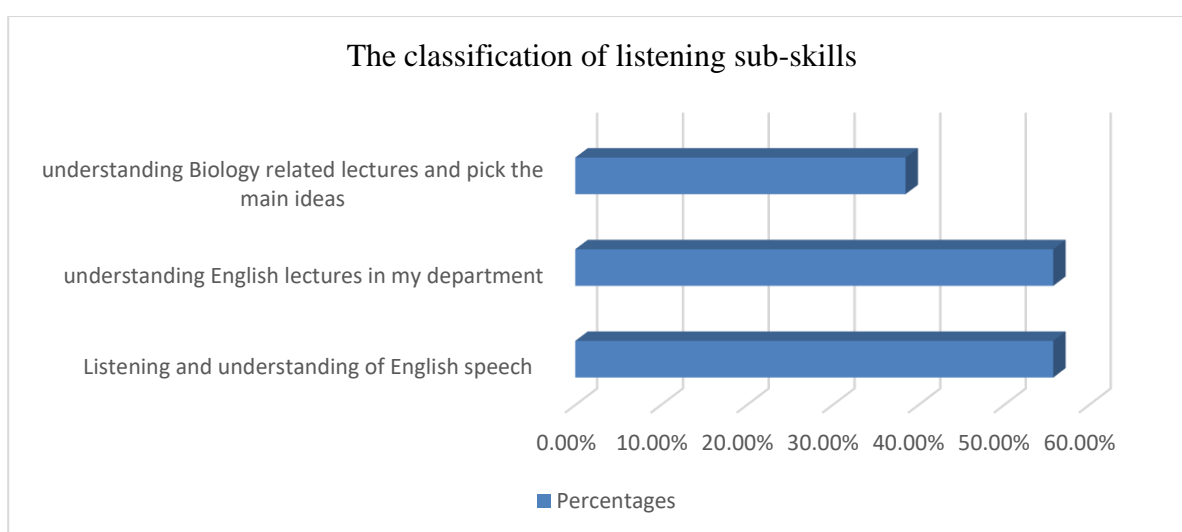


Figure 25. Students' Need for the Listening Sub-Skills

Question 5. What speaking skills do you need to improve?

As far as the speaking skills is concerned, student have shown interest in all of the speaking sub-skills as well as it ranked the first needed skill for the participants. However, (see **Figure 26** below) to speak fluently was the dominant and most selected skill by majority of students, then in the second place came talking to colleagues from other nations. In addition, participating in Biology related conversations and managing conversations with foreigners were the least selected skills. Alternatively, the analysis of respondents' answers confirms the findings of (**Question 6. In PS Questionnaire**), which concluded the students' low level of the

speaking skill, and further indicated that students find the speaking skills as the most challenging for them, in addition to their incompetence to communicating in English language. Subsequently, Moattarian and Tahririan's (2014) study confirmed, that EAP students were incapable of properly communicating in English. Thus, Hyland (2007 as cited in Gaskaree, 2020) stressed the significance of communication when he stated that EAP courses are all about "Communication rather than language". Consequently, more effective speaking and communication development activities represent students' target need for speaking skills.

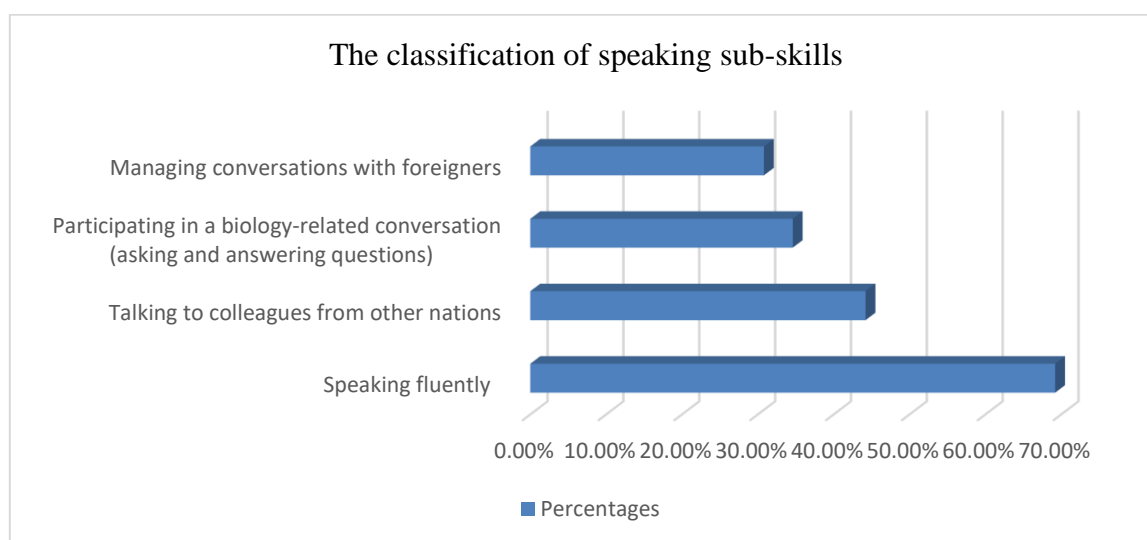


Figure 26. Students' Need for the Speaking Sub-Skills

Question 6. What writing skill do you need to improve?

In the case of writing skills, the majority of the undergraduates, estimated more than 50% (**Figure 27**), seem to place writing reports or articles, in addition to the translation from and to English as the top of their needed writing skills. Meanwhile, students of Biology gave less value to taking notes from an English speech, and even less consideration to writing emails. Even though, students previously expressed that their current English course focused on Translation and terminology. However, students remain unsatisfied of their translation skills. Ultimately, the interpretation, which can be drawn from the analysis of results, suggests that

teachers of English at biology department are not provided effective translation activities and subject related materials as well as writing reports or articles. A similar remark was made by (Haddam, 2015), that even though their current English course put emphasis on translation and vocabulary, yet Biology Master Students are still in need for further development in their translating skills.

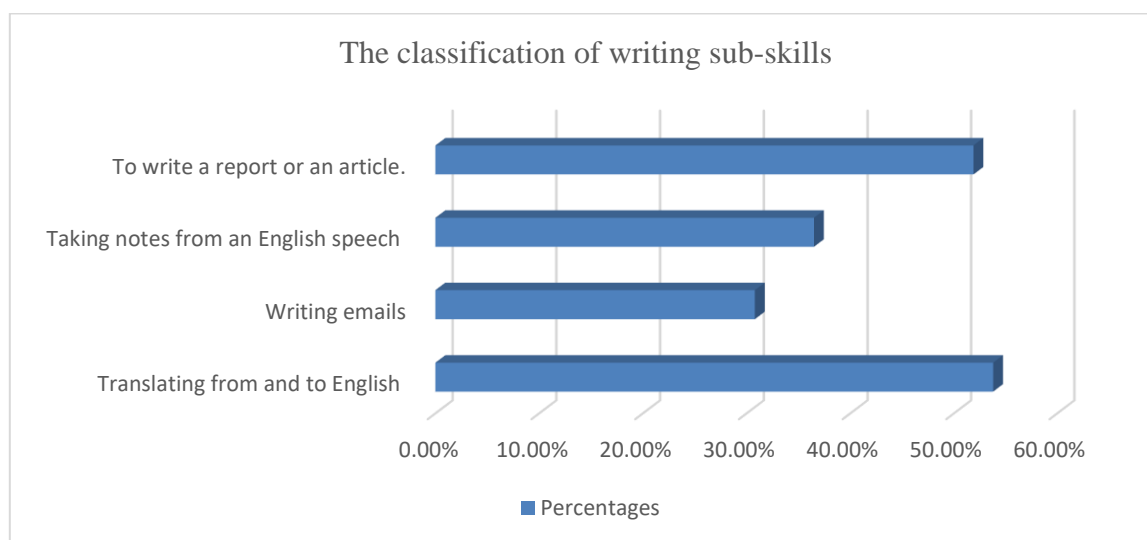


Figure 27. Students' Need for the writing Sub-Skills

2.2.2. Part two: Future Course Suggestions

Question 1. How do you prefer to do learning activities in the class?

For the sake of determining the respondents' activity performing preference, they were asked how they would prefer to learn in class, in which the answer are demonstrated in **(Figure 28)**. Performing learning activities in small groups wins as the most preferred method by Biology respondents. In addition, pair works were placed second in preference, but individual work was the least preferred by students. Accordingly, previous EAP needs analysis such as (Nimasari, 2018), who reached a similar remark that EAP University students of Informatics Engineering in Indonesia prefer to work in groups while in class. Analysis of the results indicates that Master 1 students of Biology department tend to work in pairs for such

method provides classroom communication that aid in development of their communicative competence and fluency in English language that they lack.

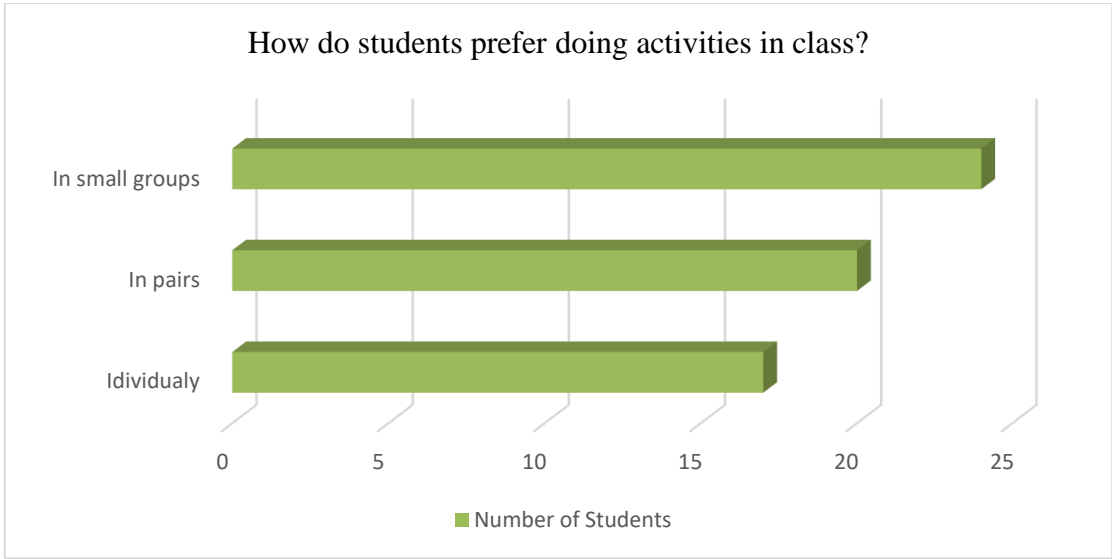


Figure 28. Students’ Preferred Method for Performing Activities

Question 2. Do you like learning?

- By listening and taking notes
- By copying from the board
- By Reading form handouts
- By getting information for myself
- Other (specify).....

As far as the current question goes, the results illustrated in (Figure 29) shows that when students were asked how they would prefer to receive and comprehend their course materials, in which respondents showed interest in all of the suggested learning methods. However, listening to and taking notes seemed to be seen as the most effective methods for the majority of students. Moreover, students showed a significantly less enthusiasm towards learning from handouts, in addition to even lesser interest in getting the information for themselves as well as copying from the board. Similarly, the results align with the finding of (Haddam, 2015), where she concluded that students favor getting information by listening to

the teacher and taking notes. Consequently, students seem to favor the listening skills in their learning process.

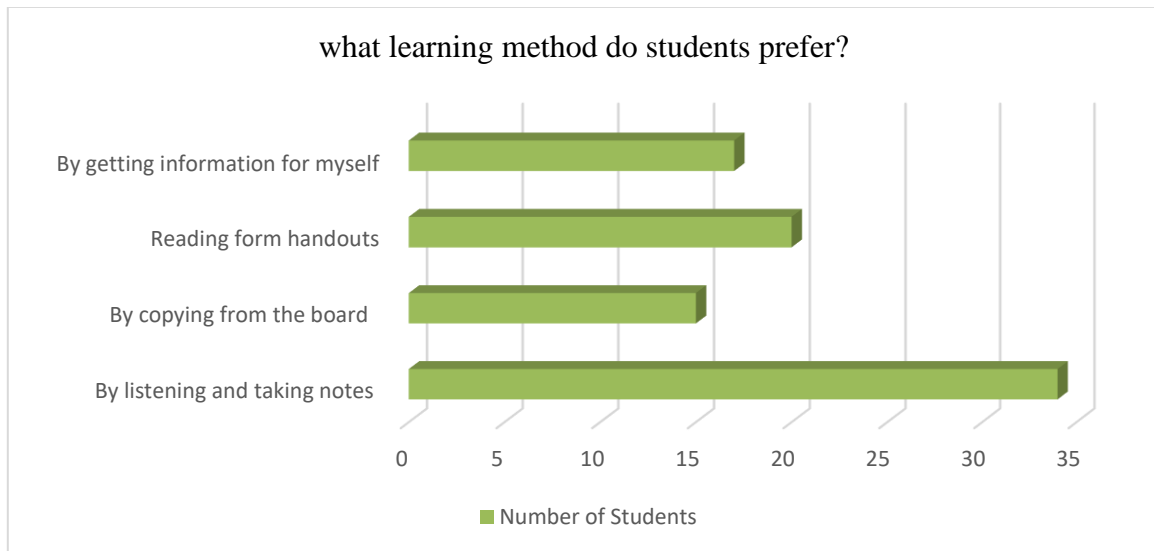


Figure 29. Students' Preferred Learning Methods

Question 3. Do you like learning by using:

- Video/DVD
- The board
- Internet
- Pictures/posters
- Other (specify).....

As far as the participants' concern, (**Figure 30**) below elicits that when they were asked what they would prefer to use in the learning process (learning instruments). Therefore, the results indicate that students highly preferred both the board and videos as their effective learning tool. Meanwhile, the usage of Internet as well as picture/posters has been found to be somehow effective for some students but not as effective as the previous two instruments. This suggests large proportions of Biology Master 1 students are audio-visual learners. In the same vein, Tomlinson (2008) defined teaching materials in ESP as any given source, which may be utilized to help students in learning languages such as textbooks, handouts, audio and videos.

Ultimately, these materials are adapted in accordance with the academic needs and preferences of the target students. To conclude, Master 1 Students of Biology department are in need for of English course material designed based on their audio-visual learning style.

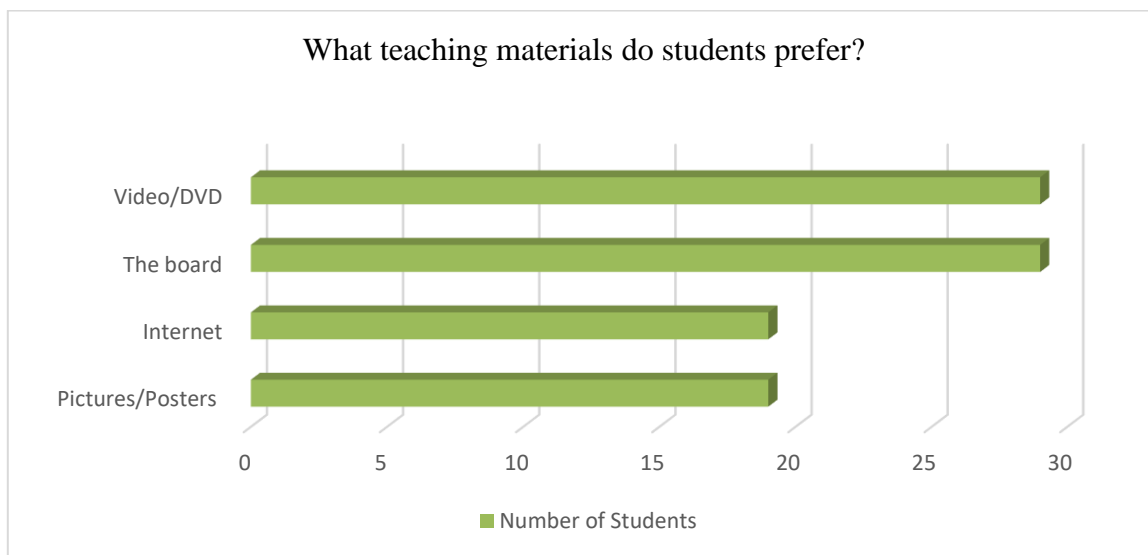


Figure 30. Students’ Preference of Teaching Materials

Question 4. Which of the following activities do you find useful?

- Role play
- Written exercises
- Language games
- Debates
- Other (specify).....

Results in (Figure 31) elicits that when participants were asked a multiple choices question of what activities they would prefer in class, their results exhibited a general identical preference to all of the suggested activities, with a slight increased preference to written exercises. Therefore, the results confirm the findings of PS Questionnaire in which it is concluded that students have crucial lacks on interactional communication and speaking skills as well the need to pass their written exams in English course. Similarly, similar remark was made in the studies of (Haddam, 2015; Nimasari, 2018 ; Ounis, 2018 ;), where it was concluded that EAP students opted for an active class that enables communication and interaction amongst students. Consequently, Master 1 students of Biology department opted for more interactive

and written activities in classroom for the sake of developing their productive skill, which has been previously concluded in (PS- Question 5) to be highly demanded by the participants.

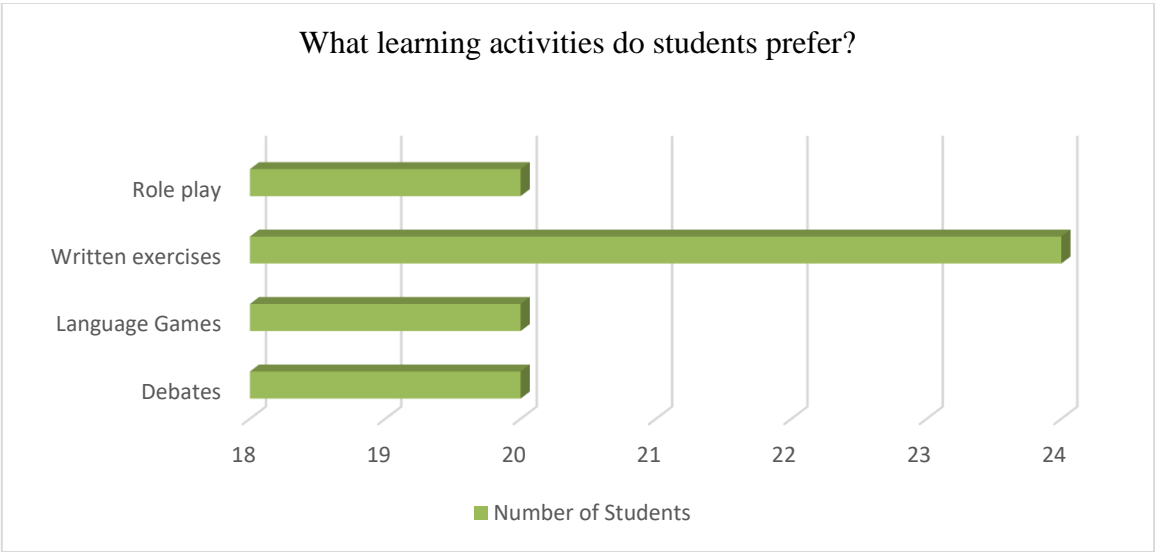


Figure 31. Students’ preferences of learning activities

Question 5. Do you have any further suggestions to improve the English language course?

To conclude the Questionnaire, students were asked for any further suggestion for their current course development. As such, (Figure 32) shows a vast majority of 71% were satisfied with the questionnaire items and their coverage to all the problems related to their current course, and had no further suggestion towards their potential modified English EAP course, but a minority of 28% had further suggestion to improve their current course.

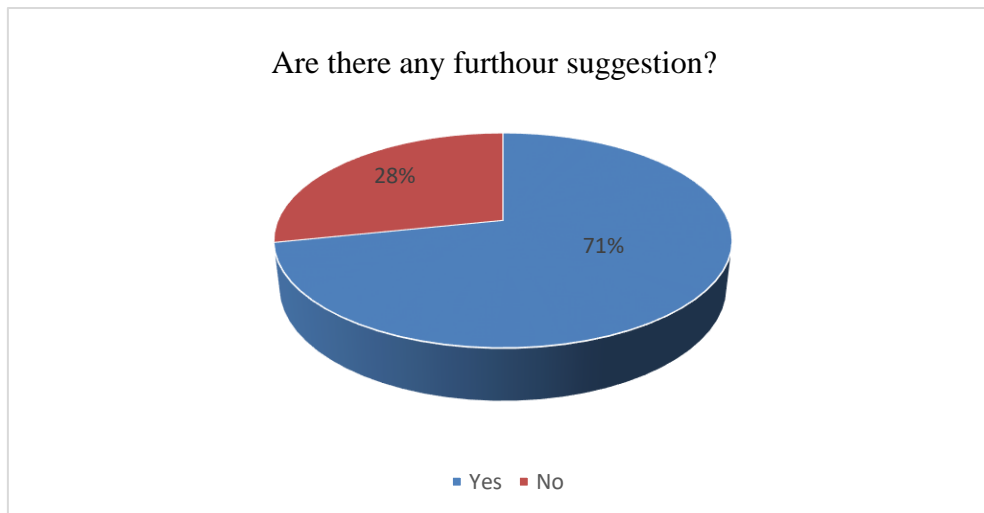


Figure 32. Studentes' Additionnel Suggestions

Consequently, the minority who had further suggestions provided several interesting suggestions that are paraphrased as follows:

- The department should consider allocating more attention to the English module and hire teachers with specialized English degrees, other than English department graduates with a Master degree.
- Including small researches, presentations as homework to be presented in class.
- English teachers should not overload the students' capacity for new information and overlap the lessons upon his/ her head. In addition, teacher ought to illustrate the difficult terms for students with low vocabulary credit.

Conclusion

To conclude, after conducting the needs analysis in both Present situation as well the target situation, a collection of student's needs, wants and lacks are interpreted. A collection of needs, which functions as a valuable corner stone for a potential EAP course design. A course design that focuses on the student's communicative skills as well their listening and reading subskills.

Chapter 5: General conclusion

Introduction

General Conclusion

The Study Limitations

Further Recommendations

Introduction

The current chapter aims to conclude the research with some of the most valuable findings that relate to the research questions and aims. In addition, the unfortunate limitations that this study has come across are further elaborated the current chapter finishes with suggestions and recommendations for similar further studies.

General Conclusion

The present study has set off to answer three main questions; what are the present as well as the target needs of Biology's Master 1 students, in addition to the inquiry of what a potential EAP course for Master one students would look like. In correlation, the researcher provided guiding hypotheses of the study outcomes. The researcher hypothesized that students lacks, want and needs are concerned with the language skills, and that learning objectives for Biology students are mainly concerned with the speaking skill. In addition, the researcher hypothesized that an EAP course would be based on the students determined needs. Therefore, to seek answer for the research questions and test the accuracy of the stated hypotheses, the present study aims to investigate, the students' present situation analysis in terms of their needs, wants and lacks. Furthermore, it aims to investigate the target situation analysis or locating the students' learning needs, in addition to forming an overview of a potential EAP course for Master 1 Biology students. Thereby, the researcher opted for a PSA questionnaire as well as a TSA questionnaire for collecting the data necessary in pursue of the research aims and objectives.

Moreover, the review of previous literature showed many major contributions to the field of needs analysis and the EAP course design. EAP as a sub-field of ESP, have gained an increasing value to the field of EFLT over the past decades. Consequently, EAP course design, as a learner-centered approach, become an extensively researched field in the

academic communities. However, it had known complaints regarding the status of EAP course design in Algerian universities. Moreover, needs analysis has been long considered as the key stone of EAP course design. NA permits the designer to formulate the course objectives, teaching materials and teaching methodology relying on the students' needs, mainly on PSA and TSA, as they are the two main approaches to Needs analysis.

On the one hand, the results indicate that in terms of present situation analysis, students are motivated to learn English, as they are unsatisfied with their current English course in their department. In addition, the results show that students want to improve their speaking, listening, writing skills as well as their translating skills; however, they seem to prioritize the speaking skills over the other skills, as it is the most required skill in maintaining an effective communication. As for their lacks, the learners lack on the communicative skills as well as language mastery. On the other hand, the target situation analysis indicates that students are in need for improvement on all their language subskills. Furthermore, it indicates that the future potential EAP course would be based on classroom interaction activities, and would be a course that relies on audio-visual teaching materials which relates to the learning preferences of Master 1 Biology students at Mohamed Khieder University.

The current research results in a PS analysis as well as a TS analysis of Master 1 Biology students has provided a purely theoretical overview of the potential EAP course design for the addressed population. Therefore, the study provided an answer to the research questions and fulfilled its aims and purposes. Moreover, needs analysis is considered to be highly overlooked in EAP course in the Algerian universities and Biology departments in particular. Consequently, this research addresses and sheds light on the academic needs and requirements of students, which are not given sufficient attention in EAP course design process. To conclude, this current study findings function as a critical component towards

designing an appropriate EAP course, that is based on Master one Biology students' academic needs to learn English.

Research Limitations

The study at hand encountered various unfortunate obstacles or limitations that disrupted the research process, which are highlighted in the following. First, the research directions initially aimed towards conducting a needs analysis as well as an appropriate EAP syllabus design for Master 1 Biology students. However, due to the insufficient time as well as the non-consistence presence of the sample population, the study aims were altered into conducting a valid needs analysis and forming an overview of what a potential EAP course for students of biology would look like. Furthermore, the study opted for the questionnaire, as the main and solely data collection tool, because Biology department's Master 1 Students do not take English as a module in their second semester, which prevented the study from utilizing classroom observations. Therefore, the researcher opted for a second questionnaire to gain further insights into the students' needs. Furthermore, locating large numbers of students who were interested in sparing the time to take the two questionnaires was extremely challenging for the researcher, due to the absence of an English class session, which could have pathed the way for familiarizing students with an English language research. Consequently, the study had come across multiple challenges along the research process, yet the researcher managed to maintain suitable research tools that adopted with the unfortunate circumstances and permit to maintain the validity and good quality value of the study.

Further Recommendations

EAP needs analysis consists of present situation, target situation, Learning Situation, strategy analysis and Means analysis. This study addressed only the PSA and TSA. Therefore, future similar researches are recommended to address the learning situation and

means analysis to further accommodating and complementing of the current study's findings. On a different perspective, while the study was limited to using questionnaires as the data collection tool, other future studies are recommended to work on implanting other data collection tools for extra validation of the study such as classroom observations, interviews of the teaching staff, the administrative board, and other stakeholders. Meanwhile, the study revealed that students regard the allocated time to English lectures per week insufficient. In addition, they regard the English teachers at their department are unexperienced in EAP field and are of low competence. Hence, future studies are highly recommended to suggest further remedies for the two mentioned remarks and contribute to the implementation of an appropriate EAP course for the Master Biology Students in Mohamed Khieder University.

References

- Abdullah, F. S. (2009). *Assessing EAP needs for the university*. UK: VDM Publishing.
Retrieved from <https://www.researchgate.net/publication/281710241>
- Alharahsheh, H. H., & Pius, A. (2020). A Review of key paradigms: positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39-43.
- Alharbi, M. (2005). *ESP Target Situation Needs Analysis: The English Language Communicative Needs As Percieved By Health Professionals In The Riyadh Area*. Athens, Georgia.
- Allen, M. (2017). *The SAGE Encyclopedia of Communication Research Methods*. Thousand Oaks, California, USA: SAGE Publications.
doi:10.4135/9781483381411
- Amirian, Z., & Tavakoli, M. (2009). Reassessing the ESP Courses Offered to Engineering Students in Iran (A Case Study). *English for Specific Purposes World*, 8(23).
- Assasi, T. (2021). The Status of ESP in Algeria: The Need for Highly Specialized Courses of English. *Humanization Journal for Researches and Studies*, 11(2), 439-455.
- Basturkmen, H. (2010). *Developing Courses in English for Specific Purposes*. Hampshire, UK: Palgrave Macmillan.
- benyelles, R. B. (2010, october). Needs Analysis: A Prior Step to ESP Course Design. *Revue des Lettres et des Langues*(16).
- Blue, G. M. (1988). Individualizing academic writting tuitions. (P. C. Robinson, Ed.) *Teaching English, Academic Writing: Process and Product*(129), 95-99.

- Blue, G. M. (1993). Nothing succeeds like linguistic competence: The role of language in academic success. *Language, Learning and Success: Studying through English*, 4-13.
- Blue, G. M. (1994). Self-Assessment of Foreign Language Skills: Does It Work? *CLE Working Papers*(03), 18-35.
- Bouderba, D., & Yahiaoui, H. (2020). Designing an English for Specific Purposes Course for First Year Biology Students: Integrating Information Communication Technologies in the Classroom. *Ichkalat journal*, 09(03), 505-526.
- 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 (IAJESP)*, 1(2), 1-22.
- Bouguenous, A. (2018). *The Need for Teaching Effective ESP Courses for Medical Students in Algeria*. The University of Sidi Bel abbes .
- Brown, J. D. (1995). *The elements of language curriculum: A systematic approach to program development*. Boston MA: Heinle & Heinle.
- Brown, R. B. (2006). *Doing your dissertation in business and management*. SAGE Publications Ltd. doi:<https://dx.doi.org/10.4135/9781849209069>
- Caruana, E. J., Roman, M., Hernández-Sánchez, J., & Soll, P. (2015). Longitudinal studies. *Journal of Thoracic Disease*, 7(11). doi:10.3978/j.issn.2072-1439.2015.10.63
- Chambers , F. (1980). A re-evaluation of needs analysis in ESP. *The ESP Journal*, 1(1), 25-33. doi:[https://doi.org/10.1016/0272-2380\(80\)90007-4](https://doi.org/10.1016/0272-2380(80)90007-4)

- Chams, E. L., Heddami, F. B., & Bensafa, A. (2016-2017). *ENGLISH FOR SPECIFIC PURPOSES (1st Semester) THIRD YEAR 'LICENCE' LEVEL*. Tlemcen: University of Tlemcen faculty of arts and languages, department of English language.
- Chan, E., & Ham, K. (2007). *EAP Listening and Speaking: From Needs Analysis to Evaluation*. University of Hawai'i at Mānoa.
- Coelho, C. H., Canepa, G. E., Arora, G., & Duffy, P. E. (2019). Integrating Scientific English into Biological Sciences PhD Programs in Developing Countries: Strategies from Trainees and Mentor. *Education Research International*, 2019. Retrieved from <https://doi.org/10.1155/2019/3807951>
- Coffey, B. (1984). ESP – English for Specific Purposes. *Language Teaching*, 17(1), 2-16.
- Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for Specific Purposes: A Multi-Disciplinary Approach*. Cambridge, UK: Cambridge University Press.
- Dudovskiy, J. (2022). *The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance*. (6th). Retrieved from <https://www.goodreads.com/book/show/35123990-the-ultimate-guide-to-writing-a-dissertation-in-business-studies>
- Elsaid Mohammed, A. S., & Nur, H. (2018). Needs Analysis in English for Academic Purposes. *HOW*, 25(2), 49-68. Retrieved from <https://doi.org/10.19183/how.25.2.409>
- Esfandiari, R. (2015). An investigation into ESAP needs of Iranian BA students of law. *The Journal of Teaching Language Skills*, 7(3), 29-59.

- Flowerdew, J. (2008). Scholarly writers who use English as an Additional Language: What can Goffman's "Stigma" tell us? *Journal of English for Academic Purposes*, 7(2), 77-86. Retrieved from <https://doi.org/10.1016/j.jeap.2008.03.002>
- Flowerdew, J., & Miller, L. (1995). On the notion of culture in L2 lectures. *TESOL Quarterly*, 29(2), 345-373. doi:10.2307/3587628
- Flowerdew, J., & Peacock, M. (2001). *Research Perspectives on English for Academic Purposes*. Cambridge, United Kingdom: Cambridge University Press.
- Gaskaree, B. L. (2020). Exploring the EAP needs of students of knowledge and information science: A triangulated study in Iranian EFL context. *Language Teaching Research Quarterly*, 14, 16–34 .
- Graves, K. (2000). *Designing Language Courses: A Guid For Teachers*. (D. Freeman, Ed.) Heinle & Heinle Publishers.
- Gravetter, F. G., & Forzano, L. B. (2011). *Research Methods for the Behavioural Sciences*” Cengage Learning . USA: Wadsworth, Cengage Learning.
- Haddam, F. (2015). *A Course Design in ESP The Case of Master’s Students in the Department of Biology*. University of Tlemcen, Algeria.
- Hamp-Lyons, L. (2011). *English for Academic Purposes*. (E. Hinkel, Ed.) Routledge.
- Hutchinson, T., & Alan Waters. (1978). *English for Specific Purposes: A learning-centered approach*. Cambridge: Cambridge university press.
- Hyland, K. (1997). Is EAP necessary? A survey of Hong Kong undergraduates. *Asian Journal of English Language Teaching*, 7, 77-99.

- Hyland, K. (2006). *English for Academic Purposes An advanced resource book*.
Routledge.
- Hyland, K. (2006). The 'Other' English: Thoughts on EAP and Academic Writing. *The European English Messenger*, 15(2), 34-47.
- Hyland, K., & Hamp-Lyons, L. (2002). EAP: issues and directions. *Journal of English for Academic Purposes*, 1(1), 1–12. doi:10.1016/S1475-1585(02)00002-4
- Ibrahim, A. M. (2017). Specialization Professors Perception on their Students Needs for ESP: PEH Students Case. *English for Specific Purposes World*, 19(54).
doi:https://www.researchgate.net/publication/321134323_Specialization_Professors_Perception_on_their_Students_Needs_for_ESP_PEH_Students_Case
- Igwenagu, C. (2016). *Fundamentals of research methodology and data collection*.
LAMBERT Academic Publishing.
- Indrasari, N. (2016). English for Specific Purposes: A Need Analysis at The Second Semester of Physics Education Students of IAIN Raden Intan Lampung in The Academic Year of 2015/2016. *English Education: Jurnal Tadris Bahasa Inggris*, 9(1), 161-172.
- James, M. A. (2010). Transfer Climate and EAP Education: Students Perceptions of Challenges to Learning Transfer. *English for Specific Purposes*, 29(2), 133-147 .
doi:10.1016/j.esp.2009.09.002
- Johns, A. (1991). English for Specific Purposes: its history and contributions. (M. Celce-Murcia, Ed.) *Teaching English as a second or foreign language*, 66-77.

- Jordan, R. (1997). *English for Academic Purposes - A Guide and Resource Book for Teachers*. Cambridge: Cambridge University Press.
- Kırkgöz, Y., & Kenan (Eds.). (2018). *Key Issues in English for Specific Purposes in Higher Education*. Sarıçam, Adana, Turkey. Retrieved from <https://doi.org/10.1007/978-3-319-70214-8>
- Klimova , F. B. (2015). Designing an EAP Course. *Procedia - Social and Behavioral Sciences*(191), 634 – 638.
- Leong, L.-M., & Ahmadi, S. M. (2017). An Analysis of Factors Influencing Learners' English Speaking Skill. *International Journal of Research in Language Education*, 34-41.
- Littlewood, W., & Liu, N. F. (1996). *Hong Kong students and their English*. Hong Kong: Hong Kong University. HKU, Macmillan, Hong Kong.
- Long, M. (2005). *Second Language Needs Analysis*. Cambridge: Cambridge university press.
- Malouki, M. A. (2016). *Designing an English ESP Syllabus for First Year Matter Sciences' Students at Brothers Mentouri University-Constantine*. Larbi Ben M'Hidi University, Oum El Bouaghi.
- McDonough, J. (1984). *ESP in perspective: A practical guide*. London: Collins ELT.
- Moattarian, A., & Tahririan, M. H. (2014). Language Needs of Graduate Students and ESP Courses: The Case of Tourism Management in Iran. *Journal of Research in Applied Linguistics*, 5(2), 4-22. Retrieved from https://rals.scu.ac.ir/article_11009_1201.html

- Munby, J. (1978). *Communicative Syllabus Design: A Sociolinguistic Model for Designing the Content of Purpose-Specific Language Programmes*. Cambridge: Cambridge university press.
- Nation, I. S., & Macalister, J. (2010). *Language Curriculum Design*. (E. Hinkel, Ed.) London and New York: Routledge.
- Nimasari, P. (2018). An ESP Needs Analysis: Addressing the Needs of English For Informatics Engineering. *Journal of English Educators Society*, 3(1), 23-40.
doi:10.21070/jees.v3i1.1085
- Nunan, D. (1988). *Syllabus Design*. (C. N. Candlin , & H. G. Widdowson, Eds.) Oxford: Oxford University Press.
- Ounis, S. (2018). *Designing Teaching Materials to Meet the Students' Needs in Learning English for Specific Purposes in Batna University*. University of Batna2 -Mostefa Benboulaïd, Algeria.
- Paltridge, B., & Starfield, S. (2013). *The Handbook of English for Specific Purposes* (1st ed.). (B. Paltridge, & S. Starfield, Eds.) UK: John Wiley & Sons, Inc. Retrieved 12 18, 2021
- Pham, L. (2018). *A Review of key paradigms: positivism, interpretivism and critical inquiry*. University of Adelaide, Adelaide, South Australia, Australia.
doi:10.13140/RG.2.2.13995.54569
- Rajulton, F. (2001). The Fundamentals of Longitudinal Research: An Overview. *Canadian Studies in Population*, 28(2), 169-185.

- Richards, J. C., & Schmidt, R. (2002). *Longman Dictionary of Language Teaching and Applied Linguistics* (third edition ed.). Pearson Education limited.
- Robinson, P. (1991). *ESP today : a practitioner's guide*. New York: Prentice Hall.
- Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Open Research Online*, 25(4), 41–49.
- Sava, S. (2012). *Needs Analysis and Programme Planning in Adult Education*. (1, Ed.) Verlag Barbara Budrich. doi:<https://doi.org/10.2307/j.ctvbkjvs2>
- Skela, J., & Burazer, L. (2021). The Architecture of ELT Coursebooks: The Internal Organization of Coursebook Units. *Journal for Foreign Languages*, 383-407. doi:DOI: 10.4312/vestnik.13.383-407
- Songhory, M. H. (2008). Introduction to Needs Analysis. *English for Specific Purposes world*(4), 1-25. Retrieved from www.esp.world.info
- Tardy, C. (2004). The role of English in scientific communication: lingua franca or Tyrannosaurus rex? *Journal of English for Academic Purposes*, 2(3), 247–269. doi:10.1016/j.jeap.2003.10.001
- Thomas, L. (2020, 5 08). *Longitudinal Study | Definition, Approaches & Examples*. Retrieved from <https://www.scribbr.com/>:
<https://www.scribbr.com/methodology/longitudinal-study/#:~:text=In%20a%20longitudinal%20study%2C%20researchers,trying%20to%20influence%20those%20variables.>

- Vahed, S. T. (2017). The Analysis Of Faculty Needs To English For Academic Purposes In A Middel-Eastern Context. *The Journal of Teaching English for Specific and Academic Purposes*, 5(1), 77-86. doi:10.22190/JTESAP1701077V
- Vinther, S., & Rosenberg, J. (2012). Impact factor trends for general medical journals: non-English-language journals are lagging behind. *Swiss Medical Weekly*, 142, w13572. doi:doi:10.4414/smw.2012.13572
- Ward Goodbody, M. (1993). Letting the students choose: a placement procedure. In G. M. Blue (Ed.), *Language, Learning and Success: Studying Through English*. Modern English Publications.
- West, R. (1998). Needs analysis in language teaching. *Language Teaching*, 27(01).
- White, R. V. (1988). The ELT Curriculum Design, Innovation and Management. *Canadian Modern Language Review*, 49(1), 157–158.
- Yegros-Yegros, A., Rafols, I., Abad-Garcia, M. F., Mugnaini, R, R., & Meijer, I. (2016). Scientific research on diseases: the distinct profile of developed and developing countries. *21st International Conference on Science and Technology Indicators*. València, Spain.
- Yundayani , A. (2018). Present situation analysis: Students' early characteristics in writing for academic purposes. *English Review: Journal of English Education*, 06(02), 119-126. doi:10.25134/erjee.v6i2.1262

Appendices

Appendix 01

Present Needs Analysis Questionnaire for Students

استبيان حول تحليل الاحتياجات الحالية للطلبة

Dear students,

You are kindly required to answer the following questionnaire that aimed to conduct a needs analysis for potential EAP course design for Master 1 Biology students. I will be grateful if you answer all the questions sincerely. Tick (√) in the appropriate box (es), or provide a complete answer when you are asked. I assure the confidentiality of your answers, which are used for research purposes only.

Thank you for your participation

اعزائي الطلبة

يجى منكم الاجابة على الاستبيان التالي الذي يهدف الى اجراء تحليل لاحتياجات طلبة الماستر 1 لكلية البيولوجيا لأجل تصميم مقياس محتمل للغة الانجليزية المتخصصة لاغراض اكااديمية. سأكون ممتنا اذا اجبتم بصدق عن الاسئلة بصدق تام , اجب ب(√) في المربع او المربعات المناسبة او اختر الاجابة الصحيحة او قدم اجابة كاملة اذا طلب منك, انا اضمن لكم سرية اجاباتكم التي يتم استخدامها لاغراض البحث فقط
شكرا على مشاركتكم

I. Section One: General background

1. Gender:

الجنس

Male (ذكر)

Female (انثى)

2. Age:

العمر

19-25

25-30

More than 30 (اكثر من 30 سنة)

3. What is your current medium of instruction?

ماهي لغة التدريس الحالية عندكم؟

English

Arabic

French

4. How do you consider your level of English before the entrance to the university?

كيف تعتبر (بين) مستواك في الانجليزية قبل دخولك للجامعة؟

Beginner (مبتدئ)

Lower intermediate (اقل من متوسط)

Intermediate (متوسط)

Upper intermediate (اعلى من متوسط)

Advanced (متقدم)

5. How do you consider your level in English now?

كيف تعتبر (بين) مستواك في الانجليزية حاليا؟

- Beginner (مبتدئ)
- Lower intermediate (اقل من متوسط)
- Intermediate (متوسط)
- Upper intermediate (اعلى من متوسط)
- Advanced (متقدم)

6. How is your current English language skill level?

كيف هو مستواك الحالي في مهارات اللغة الانجليزية؟

- Listening: Advanced Intermediate Low
الاستماع (متقدم) (متوسط) (ضعيف)
- Speaking: Advanced Intermediate Low
الكلام (متقدم) (متوسط) (ضعيف)
- Reading: Advanced Intermediate Low
القراءة (متقدم) (متوسط) (ضعيف)
- Writing: Advanced Intermediate Low
القراءة (متقدم) (متوسط) (ضعيف)

II. Section two: Current situation

7. Do you think that English courses in your department is related to your need in English?

هل تظن (ين) ان مقياس الانجليزية في قسمك متعلق باحتياجاتك للغة الانجليزية؟

- a. Yes (اجل) b. No (لا) c. To some extent (الى حد ما)

8. Do you think one-hour session per week is sufficient to learn English?

هل تظن (ين) ان ساعة في الاسبوع كافية اتعام الانجليزية؟

Yes (اجل)

No (لا)

If no, how many sessions do you think are sufficient?

اذا كانت اجابتك "لا" فكم عدد الساعات الازمة في اعتقادك؟

.....

9. For this question, please choose a number from 1-5 to indicate how much you agree or disagree with each statement and write the number next to the statements.

بالنسبة لهذا السؤال يرجى الاختيار من الرقم 1 الى الرقم 5 للاشارة الى مدى موافقتك او رفضك للجمل التالية

Extremely disagree

strongly agree

1	2	3	4	5
اعراض بشدة				اتفق بشدة

a) I want to learn English.

اريد تعلم الانجليزية

b) English module is given a high coefficient in my department.

تم تخصيص معامل مرتفع لمقياس الانجليزية ف قسمي

- c) Having a good English level will help me in my studies.
امتلاك مستوى جيد في الانجليزية سيساعدني في دراستي
- d) Having a good English level will help me to find a job.
امتلاك مستوى جيد في الانجليزية سيساعدني في الحصول على وظيفة
- e) I use English printed documentations in my field.
انا استعمل وثائق مطبوعة بالانجليزية في مجال دراستي
- f) I want to speak English fluently.
انا اريد تكلم الانجليزية بطلاقة
- g) I want to listen to English lectures in biology and understand them.
اريد الاستماع لمحاضرات باللغة الانجليزية متعلقة بميدان البيولوجيا وفهمها
- h) I want to be able to write lab reports or research papers in English.
اريد ان اتمكن من تقارير مخبرية او ابحاث علمية باللغة الانجليزية
- i) I want to read English publication in my specialty and understand them.
اريد ان اقرأ منشورات انجليزية في متعلقة باختصاصي وفهمها
- j) I want to be able to translate biology-related scientific document (reports, books, articles).
اريد ان اتمكن من ترجمة وثائق علمية في مجال البيولوجيا (تقارير, كتب, مقالات)
- k) I want to learn English to pass exams.
اريد تعلم الانجليزية لتجاوز الامتحانات

10. Your current English courses emphasize on:

مقياس الانجليزية الخاص بك يركز على:

- The listening and speaking skills.
مهارات السمع والكلام
- The reading and writing skills.
مهارات قراءة والكتابة
- The vocabulary and grammar.
المفردات وقواعد النحو
- The Terminology and translation.
المصطلحات والترجمة
- Other (specify).....
أخرى (يرجى التحديد ان امكن)

11. According to your opinion, where do u think you lack English?

حسب رأيك أين تظن انك تفتقر الانجليزية؟

- | | | | | | |
|---------------|--------------------------|-----------|---------------|--------------------------|------------|
| Speaking | <input type="checkbox"/> | (الكلام) | listening | <input type="checkbox"/> | (الاستماع) |
| Writing | <input type="checkbox"/> | (الكتابة) | Reading | <input type="checkbox"/> | (القراءة) |
| Grammar | <input type="checkbox"/> | (النحو) | Vocabulary | <input type="checkbox"/> | (مفردات) |
| Pronunciation | <input type="checkbox"/> | (النطق) | Communication | <input type="checkbox"/> | (التواصل) |
| Translation | <input type="checkbox"/> | (الترجمة) | | | |

12. If you have any other difficulties in your English language, please illustrate

اذا كنت تملك (ين) أي صعوبات اخر في اللغة الانجليزية يرجى التحديد

.....
.....

Thank you for your Time

شكرا على وقتكم

Appendix 02

Target Needs Analysis Questionnaire for Students

استبيان حول تحليل الاحتياجات المستهدفة للطلبة

Dear students,

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شكرا على مشاركتكم

I. Section One : Target Situation and Language Skills

1. What are the areas in which you think you need English?

ماهي المجالات التي تظن انك تحتاج الانجليزية فيها

In your post-graduate studies.

في دراساتك ما بعد التدرج

In your future works or career.

في مستقبلك المهني

In everyday life.

في حياتك اليومية

2. Classify the four language skills according to your needs

صنف مهارات اللغة الأربعة حسب احتياجاتك

Speaking.

الكلام

Writing.

الكتابة

Reading.

القراءة

Listening.

الاستماع

3. What reading skill do you need to improve?

أي مهارة في القراءة تود تحسينها؟

- Reading professional articles in the field of Biology.
قراءة المقالات المهنية في مجال علم الأحياء
- Reading Biology websites on the internet.
قراءة مواقع علم الأحياء على الإنترنت
- Reading foreign laboratory reports in English.
قراءة تقارير المخبر الأجنبية باللغة الإنجليزية
- Reading instructions on laboratory devices.
قراءة ارشادات الاستخدام على الأجهزة المخبرية
- Another skill.
مهارة اخرى

If you chose another skill, please

specify.....

إذا اخترت مهارة اخرى يرجى الشرح

4. What listening skill do you need to improve?

أي مهارة في الاستماع تود تحسينها؟

- Understanding English speech.
فهم الخطاب باللغة الانجليزية
- Understanding English lectures in my field.
فهم المحاضرات اللغة الانجليزية في ميدان دراستي
- Understanding biology-related lectures and pick the main ideas.
فهم المحاضرات المتعلقة بالبيولوجيا واختيار الأفكار الرئيسية
- Another skill.
مهارة اخرى

If you chose another skill, please

specify.....

إذا اخترت مهارة اخرى يرجى الشرح

5. What speaking skill do you need to improve?

أي مهارة في الكلام تود تحسينها؟

- Speaking fluently.
التكلم بطلاقة
- Talking to colleagues from other nations.
التكلم مع زملاء من دول أخرى
- Participating in a biology-related conversation (asking and answering questions).
المشاركة في محادثة متعلقة بالبيولوجيا (طرح الأسئلة والإجابة عليها)
Managing conversations with foreigners.
ادارة المحادثات مع الأجانب
- Another skill.
مهارة اخرى

If you chose another skill, please specify.....

إذا اخترت مهارة أخرى يرجى الشرح

6. What writing skill do you need to improve?

أي مهارة في الكتابة تود تحسينها ؟

Translating from and to English

الترجمة من وإلى الإنجليزية

Writing emails

كتابة رسائل إلكترونية

Taking notes from an English speech

أخذ ملاحظات من خطاب إنجليزي

To write a report or an article.

كتابة تقرير أو مقال

Another skill.

مهارة أخرى

If you chose another skill, please specify.....

إذا اخترت مهارة أخرى يرجى الشرح

II. Section Two: Future Course Suggestions

القسم الثاني: اقتراحات المقياس المستقبلي

1. How do you prefer to do learning activities in the class?

كيف تفضل القيام بالأنشطة التعليمية في القسم ؟

Individually

بشكل فردي

in pairs

بشكل أزواج

in small groups

بشكل مجموعات صغيرة

2. Do you like learning;

كيف تفضل التعلم ؟

By listening and taking notes

بواسطة الاستماع وأخذ ملاحظات

by copying from the board

بواسطة النسخ من الصبورة

Reading form handouts

(polycopié) بواسطة القراءة من المستندات المقدمة من طرف الأستاذ

by getting information for myself

من خلال الحصول على معلومات بنفسني

Other

(specify).....

أخرى (يرجى التحديد)

3. Do you like learning by using;

هل تفضل التعلم باستخدام :

Video/DVD

فيديو / DVD

The board

الصبورة

Internet

الانترنت

Pictures/posters

الصور والملصقات

Other (specify).....

اخرى (يرجى التحديد)

4. Which of the following activities do you find useful?

اي من الانشطة التالية تجده مفيدا ؟

Role play

لعب الأدوار

Written exercises

التمارين الكتابية

Language games

ألعاب اللغة

Debates

مناظرات

Other

(specify).....

اخرى (يرجى التحديد)

5. Do you have any further suggestions to improve the English language course?

هل لديك أي اقتراحات أخرى لتحسين مقياس اللغة الإنجليزية؟

Yes (اجل)

No (لا)

If yes, please specify.....

اذا كانت الاجابة "لا" يرجى التعليل

Thank you

شكرا لكم

الملخص

هذا البحث بعنوان " تحليل الاحتياجات في تصميم دورة للانجليزية لاغراض اكااديمية: تحليل الوضع الحالي وتحليل الوضع المستهدف لطلاب ماجستير الأحياء في جامعة محمد خير بسكرة". حيث ان الباحث انطلق في البحث من اجل تحليل واكتشاف احتياجات الطلبة الخاصة للانجليزية من اجل اغراض اكااديمية في الوضع الراهن والوضع المستهدف ومحاولة تجميع لمحة عن منهاج في اللغة الانجليزية. أشارت النتائج انه بالنسبة للوضع الراهن الطلبة يحتاجون تعلم مهارة الكلام الطلق والتواصل باللغة الانجليزية اكثر من مهارات اللغة الاخرى , كما قد اشارت الدراسة ان احتياجات طلبة الماستر في كلية البيولوجيا يحتاجون الى تعلم الترجمة والتواصل مع الاخرين باللغة الانجليزية بالاضافة الى ان الدراسة استنتجت ان طلبة الماستر يحبذون منهاج يعتمد على التواصل داخل القسم ةانشطة تساعد على تقوية مهارات التعاون والتواصل مع الاخرين وكما ان الطلبة يحبذون التعلم في منهاج مصمم من اجل الطلبة السمعيين البصريين.