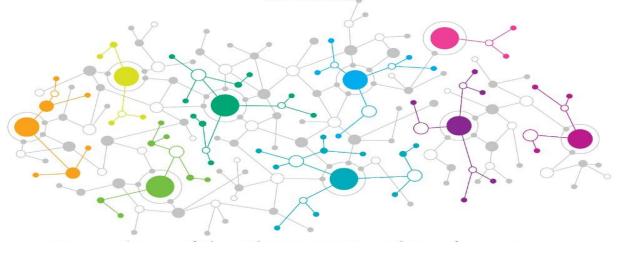


Innovation, Technologies, Education et Communication I-TEC



Proceedings of the 5th International Conference on Education, Research, and Innovation:

"Empowering Learners & Unlocking Their Full Potential"

| | April 08-09, 2025 | | Oujda, Morocco | |

Edited by

Isam Mrah

Edition:

Faculté Des Lettres et Sciences Humaines Université Mohammed Premier-Oujda

2025

ISSN: 2737-8195

ICERI 2025 Proceedings

Empowering Learners & Unlocking Their Potential

Mohammed I University

Faculty of Letters & Human Sciences, Oujda, 2025

Teaching English for Master's Students in Moroccan Faculties of Sciences: Oujda as a Case Study

Abdelaziz Dqaqi

Mohamed I University, Faculty of Sciences, Oujda, Morocco Email: a.dqaqi@ump.ac.ma

Abstract

The Master's program represents a pivotal stage in shaping students' academic trajectories. It not only introduces them to authentic research practices but also serves as an essential gateway to doctoral studies. In faculties of science, however, postgraduate students are primarily engaged in scientific experiments and specialized coursework, leaving limited space for foreign language development, particularly English. This situation is now evolving. With the implementation of *Pacte ESRI 2030*, students outside English departments are increasingly required to demonstrate strong proficiency in English. The language is no longer viewed as a supplementary soft skill, but rather as a fundamental tool for empowering Moroccan students and enhancing their linguistic, academic, and professional competence. Against this backdrop, the present paper explores the teaching of English to Master's students at the Faculty of Science in Oujda. It further examines the challenges these students face in their learning process and the strategies employed to optimize teaching and learning outcomes. The study adopts a qualitative approach, drawing on survey data collected from Master's students across different sections of the Faculty of Science in Oujda.

Keywords: master's students, Faculty of sciences, English learning, challenges, aspiration

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1. Introduction

A Master's program represents one of the cornerstones in students' academic career. It is an educational process in which students are introduced to more in-depth analysis and cutting-edge research. In faculties of sciences, students share nearly the same aspirations of their counterparts in other departments or/ and faculties; however, they find themselves entangled in a linguistic schism: While all postgraduate studies in faculties of sciences are conducted in French, another module, namely English, has been added to their curriculum in order to boost students' linguistic competence and performance, and make them more open to technology and job opportunities. While the mastery of English cannot be denied in a world where the majority of scientific papers and academic references are published in English, postgraduate students are still struggling to understand a possible linguistic shift from French to English.

1.1.Background of the Study

Once undergraduate students obtain their Bachelor's degrees, many of them become obsessed by applying for a postgraduate program either in their universities or elsewhere. Still, not all students can be short-listed for an entrance exam, and very few of them can pass that exam. Bachelor's holders are supposed to meet tough academic, scientific and/ or even linguistic requirements. Furthermore, different stakeholders have great expectations from these new recruits: While professors expect students to have a mastery of their hard skills, and some knowledge of French, the language in which all modules are conducted, the ministry of higher education has set new objectives for postgraduate students outside the department of English. According to a presentation that was delivered by the former minister of higher education, scientific research and innovation on January 09th, 2023, in what was called back then PACTE-ESRI 2030, expectations from postgraduate students are twofold: Not only are they supposed to be equipped with necessary innovation and critical thinking to boost their competitiveness, they are also meant to acquire a certificate in foreign languages and digital skills, a prerequisite to obtain their Master's degree. With regard to English, it is worthy to mention that postgraduate students undergo a hybrid method of learning English whereby they attend in-person classes, and have online classes on Rosetta Stone platform.

From this context stems the need for an academic study to be carried out among postgraduate students in the faculty of sciences in Oujda, Morocco, to find out the relevance of learning English in Moroccan faculties of sciences, and particularly among Master's students. With this in mind, this study is meant to provide answers to the preceding ideas from purely academic

and linguistic perspectives, using an online survey. The data obtained from the study are to be scrutinised and interpreted from a qualitative outlook.

1.2.Problem Statement

In faculties of sciences, postgraduate students are required to submit projects, write reports and carry out hands-on experiments. Moreover, they are meant to defend their Vivas to obtain their Master's degrees. To be able to realise this, they are supposed to have access to a wealth of scientific and academic references, which are mostly written and published in English. Therefore, students who have some proficiency in English are more likely to make use of these references in their fields of studies.

1.3. The Purpose, Significance, and Scope of the Study

The goal of this paper is to track down the importance of English in Moroccan faculties of sciences, based on a study carried out on postgraduate students from the faculty of sciences of Oujda, Morocco. The study delves into three major linguistic and educational facets, mainly students' strategies to learn English outside class, their expectations from their professors of English, and their preferences between general English and English for specific purposes.

1.4. The Research Questions and Hypotheses

The study was based on a premise that Master's students are in strong need of English in their postgraduate studies. This premise is fortified by three main research questions. These questions were related mainly to students' expectations and preferences vis-à-vis the incorporation of English in postgraduate studies, and which methods and/or approaches are most liable to foster optimal linguistic results. Nonetheless, the hypothesis that we had in mind was which English is needed in Moroccan faculties of sciences. Is it General English that introduces students to the basics of the language through a focus on grammar and the four skills, namely listening, reading, speaking and writing, or is it English for Specific Purposes which takes into account students' needs and interests?

2. Literature review and Theoretical Framework

2.1.English for Specific Purposes: Historical background

Pursuing Master's studies in faculties of sciences requires hard work, painstaking research, and academic mastery of the target program. It also necessitates some proficiency in foreign languages. Languages are not merely a tool for communication; They also serve as a means through which students can access academic references. In this regard, the need for English

among postgraduate students seems to be on the rise. However, professors find themselves at the crossroads as to which sort of English students need the most in their postgraduate studies. In this respect, Hutchinson and Waters state clearly "Tell me what you need English for and I will tell the English that you will need" (1987, p.8). This quote stipulates that this genre of English should take into account students' needs and interests.

From this context emerged a new genre of English different from the general English that used to be taught, and a wealth of literature has been written in this regard. English for Specific Purposes (ESP) came to provide an additional linguistic and academic support to students and professors alike. Lindy Woodrow defines ESP as "an approach to course design and teaching that targets groups and learners who have a common goal or purpose in learning English" (2018, p. 5). From a historical perspective, ESP is a "relatively recent branch of English-language teaching" (Woodrow, 2018, p. 9) that came to the fore to take into account students' needs, focuses on learners, increases their motivation, fosters innovative methods and approaches in course design, and takes into consideration learners' different linguistic levels. In a similar vein, Ann M. Johns and Tony Dudley-Evans consider English for specific purposes "a viable and vigorous movement within the field of TEFL/TESL" (1991, p. 297).

2.2.ESP: Needs and specificity

Language practitioners distinguish between two sorts of English: English for no obvious purposes and English for specific purposes. While the benefits of the first genre cannot be denied in boosting students' linguistic competence and performance, the second genre seems to be more worthy of consideration as it is tailored to fit students' needs and interests. In this regard, Diane D. Belcher states that "needs assessment is seen in ESP as the foundation on which all other decisions are, or should be, made" (2006, p. 135), a perspective that is shared and corroborated by Woodrow who assumes that "needs analysis is the first step of the course-design cycle in ESP and refers to the systematic analysis of what learners need in order to operate in the target communicative language" (2018, p. 21). In the same vein, Helen Basturkmen avers that ESP courses are effective means of learning as they take into account students' disciplines of study, professions or workplaces (2010, p. 17).

ESP takes students' needs into account because it is learner-centered and puts more emphasis on learners. In this respect, Hutchinson and Waters were the first to focus on the learner rather than exclusively on the discourse of the target situation, making ESP more relevant to the individual (Qtd. in Woodrow, p. 22). This learner-centered approach is perceived in ESP

practitioners' endeavour in selecting materials and course design. With regard to materials selection, ESP specialists stipulate that authenticity is the first aspect to be taken into account while selecting materials. By way of illustration, and according to Woodrow, ESP course materials are authentic and reflect the target communicative situation (p. 152). Furthermore, Basturkmen believes that "one of the key characteristics of ESP is that teachers and course developers value the use of authentic texts and tasks"(p. 62). This focus on the notion of authenticity should not be seen as exaggerated, nor does it stem from a vacuum; it is rather one of the major steps to build up students' motivation in learning the target language.

According to Penny Ur, "learning motivation makes teaching and learning immeasurably easier and more pleasant as well as more productive" (1996, p. 274). Therefore, ESP can be seen as a genre which increases learners' intrinsic and extrinsic motivation since it is tailored according to their educational and academic needs. It is described as such since "ESP learners are highly motivated. Their purpose for learning English is very specific and goal-driven" (Woodrow, p. 63). Additionally, other researchers such as Masgoret and Gardner believe that "motivation is a consistently strong predictor of successful language learning, and that their correlation is largely positive (Qtd. In Ardeo Gonzalez, p. 143).

3. Method

3.1. Sample / Participants

Students from different sections in the faculty of sciences in Oujda, Morocco were invited to take part in this study. However, only 35 students were willing to participate in this academic endeavour. 22 students of these students are females while 12 are males— a student did not mention their gender. These students belong to three different sections, namely Energetic Mechanic, Energy and Material Engineering, and Biology. 34 participants out of 35 stated that they were for the integration of English throughout Master's studies.

3.2. Data collection procedures

The questions of the study were carried out in English, and postgraduate students were kindly invited to fill out a survey via Google Forms. The participants were reassured that their identities were to be kept anonymous, and that their answers would be used for educational purposes. In this regard, the answers will not be dealt with individually; the data that we gathered will be rather analysed and interpreted qualitatively using figures and tables to guarantee more confidentiality to students' identities.

4. Results

4.1. Learning Strategies

Despite its conspicuous importance, English was introduced in the faculty of sciences, Oujda for undergraduate students only in 2022. To corroborate this fact, 33 participants out of 35 declared that they did not study English in the undergraduate program. Put otherwise, postgraduate students joined their Master's programs with the linguistic knowledge that they had garnered in high school. However, students seem to have resorted to different strategies to boost their linguistic competences. In this regard, 19 participants stated that they resorted to watching films and serials in English while seven participants stated that they communicated in English with friends and acquaintances to stay connected with English. Additionally, four interviewees said that reading was their favourite way to learn English while only 1 participant opined that they resorted to dictionaries. The results reached in this regard are shown as follows:

Table 1

Learning Strategies	Number/ Ratio	
Watching films and serials in English	19/ 54,3 %	
Communicating in English	7 / 20 %	
Reading	4/ 11,4 %	
Using English dictionaries	1/ 2,9 %	
Others	4/ 11,4 %	

4.2. Students' expectations

From a linguistic perspective, postgraduate students are in the know of the significance of English in their postgraduate studies. When asked about how English can help students in their academic career, 15 participants stated that they needed English to read references and scientific articles in English while eight interviewees stated that English would be useful for them to write articles in English. Furthermore, four participants averred that English can be a basic tool to attend conferences in English. The concepts found in this study are presented in the table below as follows:

Table. 2

Students' Expectations	Number/ Ratio	
Reading scientific articles in English	15/ 42,9 %	
Writing articles in English	8 / 22,9 %	
Attending conferences in English	4/ 11,4 %	
Others	8/ 22,9 %	

4.3. Students' preferences

While postgraduate students join their Master's programs with different expectations in mind, they have their own linguistic and educational preferences as well. In this vein, students were asked about which genre of English they prefer to study and learn: is it General English or English for specific purposes? In this regard, nine participants opted for General English while 8 participants averred that English for specific purposes is more suitable and applicable for them. Moreover, 18 participants admitted that a blended method can yield optimal results. Additionally, when students were asked about how courses should be delivered, 27 participants stated that courses should be based on professors and students' interaction while four students said that courses should be based on students' presentations. Other four participants stated that courses should be founded on professors' lectures. The tables below provide a detailed description of the findings mentioned above:

Table 3

Students' Preferences	Number/ Ratio	
General English	9/ 25,7 %	
English for Specific Purposes	8 / 22,9 %	
Both	18/51,4%	

Table: 4

Students' Preferences	Number/ Ratio	
Professors and students' interaction	27/ 77,1 %	
Students' presentations	4 / 11,4 %	
Professors' lectures	4/ 11,4 %	

To conclude, Master's students in the faculty of sciences, Oujda are generally mature and autonomous learners. Although they did not study English in the undergraduate program, they are in the know of the significance of English in their academic career as they grew up in a world in which students are exposed to English on a daily basis. When asked if they have anything to add, a student stated that they wanted to improve their English, but they do not know how to communicate in English while another participant stated that including discussions in English courses can help students in improving their speaking skills.

5. Discussion

The participants who took part in this study resort to different strategies to improve their English. By way of illustration, the majority of interviewees use informal ways to improve the target language, such as watching English programs or talking with friends and acquaintances either online or in-person. In this regard, 53,3 % of the participants opted for the former method while 20 % of them opted for the latter. This may be interpreted that students are aware of unconscious methods of acquiring English. In a world where English is becoming the world's lingua franca, Master's students prefer to get exposed to native speakers via listening, and transfer their linguistic output into linguistic input through communicating with native speakers or to random people with a native-like accent.

From another perspective, academic methods to learn English are not discarded either. In this regard, and despite being limited, 11,4 % of the participants read scientific articles while only 2,9% of them use dictionaries to look up difficult words and make word lists. These limited figures of conscious strategies to improve students' English may be construed as students' option for softer and indirect ways in their linguistic journey.

While English has become a prerequisite for students in faculties of sciences, it can be used in a variety of academic settings. In this regard, 42,9 % of the participants need English to read references and scientific articles and English. We were not surprised by this high figure since most scientific references are written and published in English. So, postgraduate students want to keep abreast with the latest publications through improving their linguistic assets. Additionally, reading can be regarded as the first step to improve writing. Postgraduate students are meant to take notes while attending conferences or/and must write articles once they apply for a doctoral program. In this aspect, 22,9 % of the participants use English to write articles while 11,4 % deem it necessary to attend conferences. This can be construed as students' aspiration to pursue their further studies, and as an openness towards extra activities conducted either in their faculty or outside its precincts.

However, one may wonder which English postgraduate students need most in their studies. In this regard, students did not reach a consensus on this point. Thus, 25,7 % of the interviewees prefer to study General English while 22,9 % of them assume that English for Specific Purposes is more appropriate for a scientific setting. The other 51,4 % believe that a mixture of both methods should be resorted to in order to reach optimal outcomes. While the figures above may demonstrate students' eagerness to study English, it is worthy to mention that professors of English in faculties of sciences are surrounded by a variety of challenges. In this respect, the syllabus provided by the ministry of higher education does not take into account students' needs and interests. Additionally, professors are in urgent need of more professional trainings—professors of English conduct all their studies in faculties of letters and humanities, and find themselves later teaching in a department completely different from the environment they came from. Moreover, students in the faculty of sciences do not have the same linguistic level, a

heterogeneity which urges professors to endeavour in designing courses that suit students' interests and increase their motivation. Additionally, Master' students are supposed to have some in-depth knowledge of their postgraduate courses; ESP practitioners are therefore required to garner some basic knowledge of the modules taught at their respective faculties either by reading or creating more networks with other professors, a method that may make ESP a fertile terrain for cross-curricular activities.

Despite the challenges that professors encounter in the learning/teaching process, they should look for the most appropriate techniques to obtain the best possible outcomes. When asked about which teaching method English should be based on, 77,1 % of the participants opted for professors and students' interaction. This figure seems to be quite logical as language learning entails communication and interaction in the first place. It can be inferred that students are rather for new ways of learning that differ from the way hard sciences are taught. This interaction enables students to ask questions, express themselves freely in an anxiety-free atmosphere, and engage in different speaking activities. It is true that lecturing has its positive side as it is time-saving and enables students to take notes; yet, only 11,4% of the participants regard it worthy of consideration. To substantiate this low figure, Stetson-Tiligadas considers lecturing a passive way of learning (2018, p. 46).

6. Implications, Recommendations and Conclusions

Teaching English for students in Moroccan faculties of sciences is of a paramount importance for postgraduate students. It should not be perceived as a soft skill which can make a difference on students' resumés; it should be rather considered a module to be dealt with diligence and hard work. Moreover, English is the linguistic tool that enables students to transfer their academic works from local settings to national and international ones. It is true that the study that we have conducted is not thoroughly comprehensive. Still, the findings that we reached in this study are logical and express students' interest in learning English throughout their Master's program and even beyond. Additionally, the findings that we attained could have more credit and reliability had the study been carried out on other Moroccan universities, and had more participants taken part in this survey. This can be perceived as a call to other scholars to conduct such an academic probe from a wider and more inclusive perspective.

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AUTHOR BIODATA

Abdelaziz Dqaqi is a professor of English at the Faculty of Sciences in Oujda. He obtained his PhD in English Studies from Mohammed I University in 2024. His main fields of interest are environmentalism and Eco-Theology.