

The Role of English in Promoting Scientific Research in Algerian Universities

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Abstract

The present research paper investigates the role of English language in enhancing and promoting scientific research in the Algerian universities. As English has become a global language for knowledge production and scientific exchange, Algerian researchers across disciplines have faced linguistic pressures to participate in international academic networks. In response, Algerian decision-makers acknowledged the importance of English and its role in promoting the quality of education and scientific research. Therefore, the status of this language has been strengthened to become a medium of instruction in Algerian universities. Additionally, a new English language training program has been introduced at the doctoral level to develop researchers' communicative skills. To investigate postgraduate students' attitudes towards the 'Englishization' of Algerian universities and to understand its role in the promotion of the quality of research, a questionnaire has been administered to a stratified sample of 20 doctoral students from various disciplines and levels. The research findings reveal that English facilitates access to up-to-date scientific literature, increase opportunities for collaboration with international research communities and promotes the visibility and the recognition

Algerian research contributions. However, the linguistic barriers are still persisting, especially among researchers trained in French or Arabic.

Keywords: English language proficiency, scientific research, Algerian universities, linguistics barriers, English as an international language

Introduction

English is widely recognized as the international language of science and knowledge. This language is dominating as the medium of research communication in international conferences and publication in international journals. It has become the language of knowledge production and dissemination. The majority of international conferences and scientific meetings require their participants to present their works in English. Algerian researchers, academics and postgraduate students across disciplines need to publish their research papers in international high-ranked indexed English medium journals for their career advancement and promotion. They have become aware that the publication of their works in Anglophone high ranked journals offer them higher opportunities of visibility around the world. Therefore, the majority of them are seeking to improve their English language skills in academic and research contexts to participate in international academic networks. This study investigates the role of English within the scientific research community in Algeria.

Research Objectives

The present study aims to:

- Investigate postgraduate students' attitudes towards the 'Englishization' of Algerian universities.
- Highlight the role of English in the promotion of the quality of research.

- Identify the needs of doctoral students to enhance their English academic writing.
- Examine the challenges doctoral students encounter when using English in research.

Research questions

- How important is English for scientific research in Algeria?
- To what extent do doctoral students in scientific research in Algeria currently use English?
- What are the major obstacles doctoral students often face when using English in research?
- How can these obstacles be overcome?

Research Method

The descriptive method is employed in this study to provide a description of the status of English in scientific research in Algeria. A questionnaire has been administered to doctoral students to collect quantitative and qualitative data regarding the issue under study.

Population and sampling technique

The population of the study covers all third-year doctoral students enrolled at Batna 2 University. The participants in the study have been chosen using the stratified sampling technique on the basis of their level of English language proficiency. Five participants have been chosen from each level (A2, B1, B2, and C1) to answer the questionnaire.

Theoretical Perspectives

The need for an English course and workshops as training interventions is increasing to enhance researchers' academic writings for scholarly publication. The learning/ teaching of English for a successful academic path is usually addressed in two types of ESP course: EAP (English for academic purposes) and ERPP (English for research publication purposes).

EAP (English for Academic purposes)

The term of English for academic purposes was coined by Tim Johns in 1974. In 1980, the first journal of EAP was created. EAP is often regarded as a branch of ESP along with EOP (English for occupational purposes) and EST (English for science and technology). "It is specialized English-language teaching grounded in the social, cognitive and linguistic demands of academic target situations, providing focused instruction informed by an understanding of texts and the constraints of academic contexts" Hyland (2012, p. 2). It is a specialized English course designed to fulfill the need of a group of researchers or students and target their academic communicative practices. In other words, English for Academic Purposes is "the teaching of English with the specific aim of helping learners to study, conduct research or teach in that language" (Flowerdew & Peacock, 2001, p. 8). The interest in this field and its importance are dramatically increasing in the last two decades due to its increasing use in the globe in the job market, academic research and international education. EAP is nowadays taught in many universities around the world.

Learners' Needs in EAP

The formality of language and disciplinary based content are the main peculiarities of EAP course. Teachers teach formal language in relation to specified discourse. The field is based on the analysis of academic language needs of learners. The teaching of English should be matched with the needs of language learner. To design an effective EAP course the

instructor needs to assess or analyze students' needs and expectations to set plans and goals. Needs are specific linguistic aspects that learners need to develop in relation to specific disciplinary context. The aim of EAP is to satisfy a student's need for a "quick and economical use of the English language to pursue a course of academic study" (Coffey, 1984, p.3).

English for Research Publication Purposes

ERPP is a genre-based type of EAP. The nascent field of ERPP has emerged in 2008 in response to the rise of English as a lingua-franca of scientific research and publication in the world. ERPP is the field that is concerned with the use of English as a medium in research and publication. It helps researchers publish in international journals. English for Research Publication Purposes (ERPP) is a branch of "EAP [English for Academic Purposes] addressing the concerns of professional researchers and post-graduate students who need to publish in peer-reviewed international journals (Cargill & Burgess, 2008, p. 75).

At the beginnings, this field addressed researchers whose native language was not English. Then, the scope has been expanded to include even Anglophone researchers since they also need to learn elements related to research papers writing and publication.

Non-native Scholars who have linguistic difficulties in English face many difficulties to participate in the international knowledge production community. According to Paltridge, Starfield (2013), there are several aspects of the globalization of the research world that may adversely affect NNSE scholars' publication success:

- The quality of language: poor language is one of the main reasons of manuscript rejection
- The articles or texts structures and rhetorical norms that can differ across languages and cultures

- The lack of resources and contact with leading research communities which isolated peripheral scholars from updated developments in their discipline

Genre Based Pedagogy and ERPP

Research article (RA) is the most studied genre in academic writing in this field.

However, other genres are also included such as reports and research grant proposal, book reviews, conference papers presentations and academic blogs. Genre analysis or genre based teaching is very important for ERPP pedagogy. For example in the analysis of Research Articles (RA) written by experts, learners learn the academic writing's conventions and rules. They can understand that the introduction has a certain predictable pattern of research context such as the statement of the problem, the hypothesis, research questions etc. they can learn how to write the discussion section. As an example, the CARS (creating a research space) model proposed by Swales to write an introduction can be taught ERPP course. Moreover, they can learn how empirical studies are structured using IMRAD which consists of four sections: introduction, method, results, and discussions. The introduction tends to have a predictable structure such as the statement of the research problem. It is worth mentioning that these features of research article are not specific to a particular field.

Hence, the ERPP course can be divided into two aspects

1. Generalities that can be applied in all disciplines' writings such as the use of reporting verbs or tenses in abstracts and research formats, formal language, specific genre structure, how to move from general to specific in paragraphs, synthesizing and outlining, the use in-text citations and references etc.

2. Specific aspects that are related to specific discipline such as teaching discipline specific words list and specialized jargon.

The main findings of the Questionnaire

1. *How often do you use English in your research activities?*

	Always		often		Sometimes		Rarely		Never	
A2			1	20%	4	80%				
B1			4	80%	1	20%				
B2	2		3	60%						
C1	3		2	40%						

2. *When do you use English in your research activities?*

	Reading academic articles and books		Writing research papers		Presenting a research paper		All of them		other	
A2	3	60%	2	20%						
B1	2	40%	2	40%			1	20%		
B2			1	20%			4	80%		
C1							5	100%		

3. *Are you comfortable when using English in research activities?*

	<i>Yes</i>		<i>No</i>	
A2			5	100%
B1	3	60%	2	40%
B2	5	100%		
C1	5	100%		

4. *How important do you think English is for scientific research in Algeria?*

	Not Important		Neutral		Important		Very important	
A2					2	40%	3	60%
B1					1	20%	4	80%
B2							5	100%
C1							5	100%

5. *Do you support the idea of making English the main language for scientific research in Algerian universities?*

	Yes		NO	
A2	4	80%	1	20%
B1	5	100%		
B2	5	100%		
C1	5	100%		

6. *Do you believe that English can enhance the quality of scientific research in Algeria?*

	Yes		No		Unsure	
A2	4	80%			1	20%
B1	5	100%				
B2	5	100%				
C1	5	100%				

Explanation

The respondents who acknowledged the role of English in enhancing scientific research provided the following explanations for their answers

- It increases international collaborations and exchange projects
- It allows participation in international research community
- It contributes to knowledge dissemination and recognitions from global peers.
- Facilitates access to the latest studies and approaches
- Publication in high- impact journals

7. *Do you think publishing in English increases the visibility of Algerian research on the international level?*

	Yes		No	
A2	5	100%		
	5	100%		
B2	5	100%		
C1	5	100%		

8. Have you taken English courses in:

General English, English for Academic Purposes and/or English for Research

Publication Purposes?

	General English course		EAP course		ERPP course		other	
A2	5	100%						
B1	5	100%						
B2	5	100%						
C1	5	100%						

9. What challenges do you face when using English in scientific research?

	Poor language proficiency		Lack of English language resources		Poor or insufficient training in academic writing		other	
A2	5	100%						
B1	3	60%			2	40%		
B2					4	80%	1	20%
C1					5	100%		20%

A Respondent from B 2 level reported that he/she faces a psychological problem related to the low self – confidence when using English especially in oral communications.

10. What support would you need to use English more effectively in your research?

The answers of this question are closely related to the nature of the difficulties doctoral students encounter when using English in scientific research.

Respondents with the elementary level (A2) emphasized the need for General English courses which focus on linguistic elements such as grammar, phonology and phonology are addressed. Two B1 doctoral students highlighted the need to English training classes to develop oral presentation and communication skills. A B1 respondent proposed the creation of centers in universities to provide language assistance, editing, and proofreading service and offer free access to language tools such as Grammarly and Turnitin. The majority of the respondents from advanced levels expressed a need for a regular participation in workshops and specialized training in English academic writing where areas such as the use of transitional words and phrases, research related vocabulary, reporting verbs, abstract writing are addressed. Notably, a C1 doctoral student mentioned the need to attend English for Research and Publication Purposes class.

Summary of the Main Findings

The research findings reveal important insights regarding the use of English language and perception within the context of scientific research in Algeria.

- **Frequency of English Use:**

Respondents with Higher proficiency levels (B2 and C1) constantly use English in research activities such as in reading academic resources, writing papers, and presenting research.

- **Importance of English in Research:**

All respondents across proficiency levels acknowledged the critical importance of English for scientific research in Algeria. It is essential for international collaboration, participation in global academic networks, and access to updated scientific resources and publication in high ranked journals

- **Challenges in Using English:**

Lower proficiency levels (A2 and B1): Challenges were related to poor linguistic performance. They often struggle to structure grammatically correct sentences, find the appropriate term or articulate the exact sounds.

Advanced levels (B2 and C1): Challenges focused on a lack of specialized training in academic writing and insufficient exposure to advanced research-related vocabulary and conventions.

- **Training Needs:**

Respondents with elementary proficiency level (A2) emphasized the need for general English courses to acquire linguistic knowledge related to grammar and vocabulary

B1-level students reported the need for trainings that improve oral presentation and communication skills.

Advanced-level respondents (B2 and C1) highlighted the need to participate in workshops on academic writing, including cohesion, coherence, research paper format and structure.

- **Attitudes Towards English:**

Most participants were in favor of adopting English as the primary language for scientific research in Algeria. They believed it would enhance the global visibility of Algerian research, boost credibility, and facilitate greater participation in international academic networks.

Conclusion and Recommendations

The power of English has increased to become the international language of knowledge production and dissemination. The use of English in scientific research has become one of required criteria to assess the quality of research studies as they can reach higher visibility (larger audience), gain international recognition and credibility. The present study highlights the important role of English and its status in Algerian scientific research. The findings reveal that this linguistic tool serves as a gateway to international academic resources, global collaborations and wide dissemination of the research works. However, challenges such as limited language proficiency, and insufficient training in academic English hinder its effective use. Consequently, specialized English training programs and courses such as EAP and ERPP are recommended to encourage the adoption of English as a medium of research, improve the quality and visibility of Algerian research on a global scale and increase participations in international research networks.

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