

Teaching Academic Vocabulary to Doctoral Students

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Abstract: *The majority of non-native English doctoral students enrolled in the PhD programs provided today by “Dunărea de Jos” University of Galați master general English grammar and vocabulary and are familiar with the technical and highly technical vocabulary of their specialized professional area as most of them have professional experience in their field of study. At this point, they might be interested in developing their scientific knowledge and in acquiring or consolidating the vocabulary which is used in academic contexts to present arguments, define, make comparisons, state contrasts and so on. In addition, they need to develop their research skills and fully understand the intricacies of academic writing in an attempt to produce valuable scientific papers (planning, ordering the information, referencing, drawing conclusions). Moreover, they need to improve their communication skills and learn how to present effectively the findings of their research (assess and interpret results, describe data using key quantifying expressions, reporting, explain, emphasize, inform and engage the audience), in an attempt to develop interpersonal communication. However, it is of the utmost importance at this stage to learn how to overcome anxiety or fear of public speaking in order to be able to share their ideas and opinions. The present paper is part of a larger study and outlines the importance of providing doctoral students with all the information they might need in order to make original and correctly formulated contributions to their research field and to help them cope with the new harsh reality. Furthermore, it emphasizes the complex role of the ESP teacher, who may have a great impact not only on student learning but also on student academic well-being.*

Keywords: *doctoral students, academic vocabulary, academic writing, psychological dimension*

Introduction

All of the institutions of higher education in Romania have been in a constant state of modernization, transformation and updating during the past thirty years, in their attempt to respond better to the continuously changing expectations of the labour market. Currently, all universities compete for providing an increasingly broader range of programs for students to choose from. Taking into account the market requirements, the study programmes provided by the universities in Romania include accredited or authorised Bachelor's and Master's degree programs and also excellent doctoral

programs in different areas of study. In this respect, the Romanian Agency for Quality Assurance in Higher Education constantly assesses their performance indicators and sets certain standards and criteria that must be met for the evaluation and periodical accreditation by the universities which organize doctoral programs. Today graduates interested in earning a doctoral degree in various disciplines can choose from a wide variety of doctoral studies currently offered by the 47 universities in Romania, which organize doctoral programs (IOSUD 2022). [4032] But their choice may be very difficult because of the wide and diverse offer, on the one hand, as well as because of the profile and specificity of each school, on the other. The doctoral schools in Romanian universities organize their activity on the basis of both national norms, laws, rules, regulations and institutional methodologies. It is these very methodologies which ensure the background of originality of the curricula and extracurricular activities of the Galați School of Doctoral Studies and of the doctoral dissertations elaborated in this institution.

Doctoral Studies of “Dunărea de Jos” University of Galați

Statistics shows that the number of doctoral admissions and completions has been volatile, showing a gradual upward trend over the years (Iftimescu, Stîngu, Lupescu 124). Currently “Dunărea de Jos” University of Galați offers doctoral studies in four main domains: Engineering, Socio-Humanities, Fundamental and Engineering Sciences and Biomedical Sciences and graduates who wish to embark on a research degree today have access to 14 different domains.

It is common knowledge that doctoral research involves much exploration, strenuous educational effort as well as a significant amount of original writing and the duration of doctoral studies is normally of three years. Students admitted to doctoral programs are responsible for conducting their own research and producing a considerable amount of work, striving to make important contribution to the research environment. In addition to broadening knowledge, and passing certain examinations, they are expected to plan, draft, write and orally defend an original doctoral dissertation in front of a committee of faculty members. This is a very complex process, which requires certain determination and skills that can be developed or acquired through training.

In this regard, “Dunărea de Jos” University of Galați organizes periodically various mentoring activities, workshops, seminars and international conferences of doctoral schools. All these scientific manifestations are excellent opportunities for students to develop their research properly, to improve skills and meet scholars and researchers from

other fields, institutions or countries, which might pave the way for future collaborations and enhance the quality of the doctoral programs.

Specificities of Doctoral Studies

It has long been recognized that applicants to doctoral programs are neither well informed about the specificities of doctoral studies, nor fully aware of the challenges they are about to face. Undoubtedly, the plethora of academic demands that doctoral students are expected to meet can sometimes be overwhelming. The doctorate journey usually starts with a twofold search: selecting a topic in the research field (those interested in pursuing a doctoral degree can either expend the in-depth research conducted for their Master's dissertation or investigate a new topic that holds inherent interest) and choosing an advisor, who will provide assistance with the entire process.

It is common knowledge that doctoral students are expected to be able to communicate effectively at professional level, write clearly and concisely and publish their original research in English-language journals. Since English has become a major requirement due to the transition to English-only communication in the academic environment, the curriculum of the doctoral school of “Dunărea de Jos” University of Galați includes an English course in the first semester of the advanced training program. The main purpose of this course, which should be designed especially for doctoral students after considering their multidimensional needs, is to equip them with the necessary tools for publishing research articles in English-language journals, for delivering effective oral presentations in English and thus for acquiring the level of English language proficiency required to operate successfully in the academic world.

After earning a Bachelor's degree and a Master's degree, most doctoral students usually have a good command of English. By now they are familiar with English grammar and technical and specialized vocabulary. What they need to learn at this point is how to use English in academic contexts and to develop their ability to communicate both orally and in writing, coping with the impact of advancing information and communication technologies. They are expected to be well informed about recent contributions in their field of study and to learn how to promote and speak about the research they are conducting, to understand and point out how this research contributes to the literature or whether it fills a gap they must have identified during their individual study. At the same time, they have to demonstrate that they can present reviews of specialist literature, make reliable syntheses of the consulted materials and possess the knowledge, force of argumentation as well as the abilities to defend their findings and opinions.

Teaching Academic Vocabulary

Most linguists concur in the conclusion that English is *the lingua franca of the academic world* (Crystal 4, Mauranen, Hynninen, Ranta 44, Gotti 48, among others). The pressure exerted by the national requirements which demand that both academics and doctoral students to publish in English, especially when it is not the researcher's native language, is determined by the opportunity of a wider audience in the global scientific community. Moreover conferences, meetings, seminars, webinars and workshops are held in English, website content is in English as well, and scientists all over the world need English to communicate clearly and concisely. Consequently, the strict use of English in prestigious scientific journals has proved to be a practical solution as the main means of dissemination as it facilitates global communication.

Literature review highlights the need to distinguish between *general academic vocabulary*, which encompasses general high-utility words used in various fields such as *principle* or *perspective* and *specialized content vocabulary*, which is part of the academic vocabulary and includes domain-specific words vocabulary such as *forensic* for science or *anaesthesia* for medicine (Dugan 5).

Academic Language refers to the use of English in academic environments. As a result, professional language is essential in order to explain concepts, disseminate results and describe processes, content information and abstract ideas. Although numerous studies have been conducted on English for Academic Purposes, there is very little research on what exactly to teach at doctoral level. However, it has been pointed out that the main task of a course developer is to expand the knowledge of the academic vocabulary and academic writing while “keeping in mind the goals of the doctoral students as they enter and exit the program” (Taylor 134). Regardless of the doctoral program or domain, each group of doctoral students is highly heterogeneous as they have different professions but they are familiar with their domain-specific vocabulary. Since in Romania university teachers have the freedom of designing their own teaching materials, they bear the entire responsibility for the language instruction process. However, past experience has shown that by asking for student feedback at the end of each semester and discussing frankly which aspects need to be changed can lead to some effective teaching materials, which can be constantly improved with new strategies and activities.

In our opinion, an effective teaching material should be a link between theory, research and practice, which responds to students' expectations in ways that would help them learn and would lead to personal

growth at the same time. Consequently, an efficient English course for doctoral students, should have a threefold purpose: (1) to expose students to academic vocabulary; (2) to familiarize students with the strict requirements of academic writing in order to express their opinions and ideas effectively and (3) to raise students' awareness of the techniques they may resort to in their attempt to control and overcome emotions when speaking in public.

These objectives will be seen to interrelate to a certain extent and to have their own separate scope. Thus, our image of these purposes and their overlapping is represented in Figure no. 1 below. The academic vocabulary intersects with both academic writing, which relies on the personal selection of each individual in terms of single or multi-word lexical unit which is peculiar to academic terminology, accepted in its broad sense, and with oral presentations which also depend upon the use of the proper term. The right lexical or terminological choice plays a greater role in the case of oral presentations due to the direct and obvious impact they can exercise upon an audience.

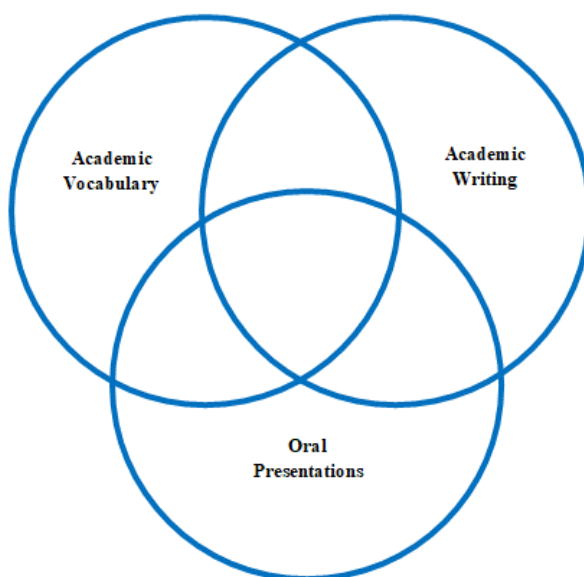


Figure no. 1 The main objectives of an efficient English course for doctoral students (Source: author's study)

Since one challenging task of the designer of the English course for doctoral students is to tailor the material to meet doctoral students' specific needs, the emphasis should be put on building and expanding their academic

productive vocabulary. In order to do so, doctoral students should be provided with updated, authentic and appropriate learning resources as it has long been recognized that one of the most effective learning methods is to have access to genuine materials and to learn the meaning of new words from the context in which they occur.

In addition, the focus should be on devising various types of exercises (such multiple matching, word-formation, gapped text, key word transformation and others), which revise and extend the academic vocabulary and on suggesting activities that would develop certain skills. However, the overall purpose of this material is to help doctoral students become better prepared for the academic world on the one hand, and to overcome public speaking anxiety in order to increase academic performance and boost confidence, on the other.

Nation (6-12) pointed out the importance of setting vocabulary goals when designing a language course, distinguishing between high frequency words (i.e. general or common core vocabulary), academic words (frequently used in academic contexts, therefore essential to English for Academic Purposes), technical words (specific to a particular subject area and different from one field to another), and low frequency words . When dealing with specialized terminologies, there have been advanced several classifications so far (Kennedy and Bolitho 1984, Coxhead 2013). A classification which synthesizes elements of preceding models distinguishes between (a) *highly specialised/technical terms*, (b) *specialized/sub-technical/semi-technical terms*, (c) *terms or daily vocabulary which have acquired a specialization of meaning* and (d) *terms which behave as words in every day communication*, as in the next figure.

These types of exercises should direct doctoral students' attention to certain aspects. To begin with, they should be provided with relevant materials which show that certain words have different meanings in various contexts such as *underline*, *reference*, *contract*, *structure*, *generate* or *confirm*: e.g. *Underline the correct answer*. (“draw a line under the correct answer”); *The findings underline the powerful influence of social media on teenagers*. (“point out”). Also there should be emphasized the difference between every day words and academic use such as *give* → *administer*, *get* → *acquire*, *try* → *attempt*, *study* → *investigate*, *support* → *advocate*, *influence* → *affect*, among others.

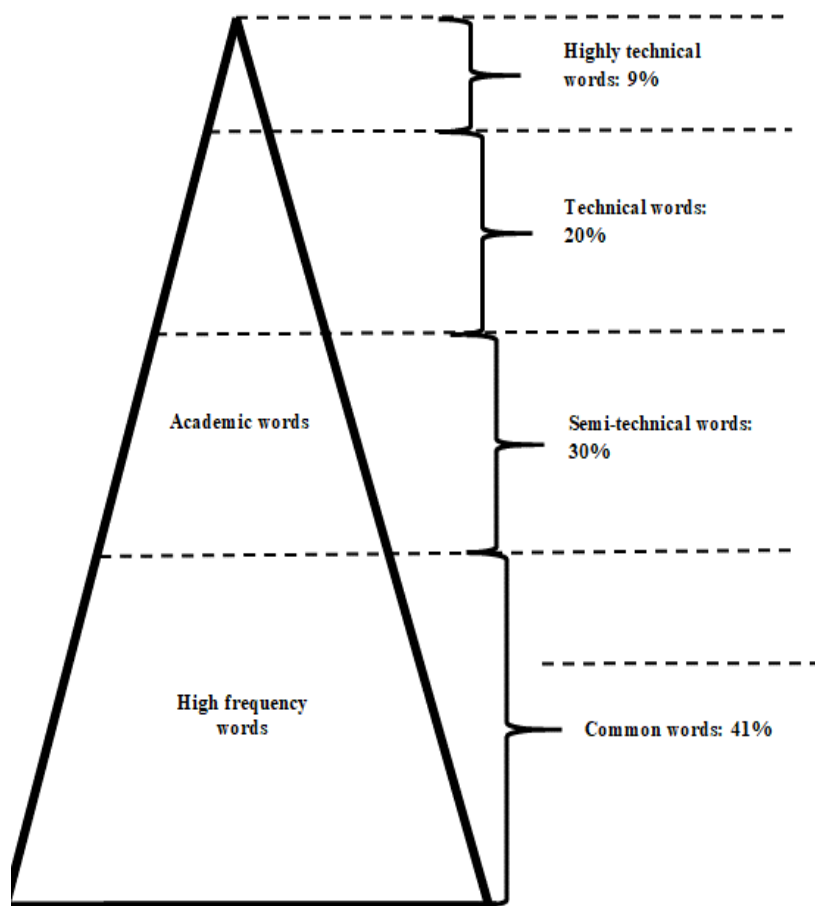


Figure no. 2 Pyramid of vocabulary (Source: Nation 2001, Popescu 2023)

Special attention should be drawn to the main characteristics of the academic language such as the frequent use of words with Latin or Greek origin and their plurals: *-um* → *-a*: *bacterium* – *bacteria*, *-on* → *-a*: *phenomenon* – *phenomena*, *-is* → *-es*: *hypothesis* – *hypotheses*, *-a* → *-ae*: *formula* – *formulae*, also *formulas*, *-ix* → *-ices*: *vortex* – *vortices*, also *vortexes*, and others; linking markers: *furthermore*, *in spite of*, *despite*, *hence*, *nonetheless*, and so on; prepositional phrases such as *in conjunction with*, *by far*, *in terms of*, *in most respects*, and others; typical word combinations – verbs and prepositions: *attributed to*, *react to*, *equip with*, *exposed to*, *consent to*, nouns and prepositions: *dissertation on*, *investigation into*, *analysis of*, *rationale for*, *attempt at*, adjectives and prepositions: *relevant to*, *characteristic of*, *specific to*, *typical of*; common collocations and idioms used in academic contexts: *in excess of*, *with respect to*, *as opposed to*, *with the exception of*, *to shine a light on*, *to remain in the dark*, *to shed new light on*, *to maintain a united front*; or complex noun phrases: *professional*

development workshop, three-member dissertation committee, interdisciplinary research paper and others.

Another aspect worth considering is the use of phrasal verbs (and phrasal nouns) in academic contexts. Despite a widely held belief that these verbs are informal and should not be used in the formal register and that their single-word equivalent is highly recommended, phrasal verbs are frequently used in all language registers. Sometimes they even pose serious challenges as some of them are highly polysemous and have different levels of idiomacity, such as *inveigh against* (= criticize), *subject to* (= dependent on smth forced to do smth by law), *infringe on/upon* (= violate), *put forth* (= to present something for consideration or judgment), *put forward* (= propose for discussion), *rest on* (= rely on/depend on/be based on), *draw on* (use information or knowledge for a particular purpose), *set out* (= describe), *carry out* (conduct) e.g. *Doctoral students are expected to carry out complex research.*

Nevertheless, a greater emphasis should be put on oral language practice activities in order to develop a deep understanding of language registers and thus to learn how to make the transition from informal to neutral and formal register and to develop certain skills and abilities, which are highly needed by the students engaged in doctoral training. These skills, which may span from research and planning skills, time-management, meeting deadlines, ability to make complex decisions, ability to work under pressure, creative thinking, skills of developing research questions, dissemination of results, public speaking skills, ability to articulate opinions, ability to come up viable solutions to real world problems and last but not least, coping with stress, must be embedded fully into the curriculum. Several examples of oral activities of such type are planning and delivering an oral presentation on a certain topic or on a topic chosen by students, describing change, trends and data in charts, graphs and diagrams, presenting statistics, analysing results, reporting what others say or even creating an elevator pitch. The process of peer assessment can make these activities useful and fun at the same time as learning by doing stimulates decision making, active listening, observing and creative thinking, which cultivates questioning and leads to better results. Nevertheless, the ability to communicate effectively will give them the upper hand not only in the academic world but also in a future of increasing complexity, since working across sectors is problematic and society is currently exerting extreme pressure and the working environment is constantly changing.

Obviously, research problems are usually multidimensional and could trigger serious challenges which might impair students' general academic welfare. Graduates are aware from the very beginning of this endeavour that

they are expected to write and submit for publication genuine papers during doctoral studies but the lack of academic writing experience can undoubtedly lead to an increase in doctoral students' anxiety and stress level.

Research has shown that the main principles of scientific writing are *to educate*, i.e. to advance understanding, *to inform* concisely and accurately, *to record* (scientific publications can be consulted at any time in the future) and even *to persuade* (Day, Sakaduski 1). Furthermore, the writing activities should not focus solely on the main functions of the academic language like defining, exemplifying, comparing and contrasting, classifying, analysing, persuading and drawing conclusions (Christison, Murray 113) but also on describing, expressing a problem, reporting, describing processes and change, expressing proportion, hypothesizing, predicting, presenting an argument, making recommendations, describing research methods, synthesizing and evaluating. Therefore the material should aim at helping doctoral students understand the complex process of writing a research article, which may start by introducing the most commonly used structure which was suggested by Cargill and O'Connor Patrick (13), i.e. an AIMRaD (Abstract, Introduction, Materials and methods, Results and Discussions). In addition, it should be emphasized how important is to choose a concise title, which expresses clearly what the research article is about, instead of using metaphors, puns or questions to make it sound more appealing but less professional.

However doctoral students' level of knowledge related to academic writing should be constantly assessed in order to identify things that might be improved and skills which need to be developed. Students enrolled in a doctorate degree programme might be familiar with planning and structuring their research. At this point they should be explained how to determine a gap in the research field, to search for relevant studies in order to provide a theoretical framework, taking advantage of all available resources.

In order to carry out literature searches for their papers, they are expected to read widely and to select the most relevant information on the topic. In addition to landmark studies in the field written by renowned authors, they should also devote special attention to the articles recently published as journals are highly interested in citable papers. In addition to revealing the gap in the field and originality, the paper must also emphasize the novelty of the research. When they present and disseminate their research findings, they should point out that there is always room for further research. Furthermore, they should be explained how to select target journals, to keep an eye on the editorial board's style and format requirements, to choose an appropriate title and to select keywords. Moreover, special attention should be thus devoted to referring to source materials as understanding how to deal with in-text referencing conventions, to compile reference lists and to cite

properly is highly important in order to avoid any possible charges of plagiarism. All these aspects must be taken into account in order to produce publishable manuscripts.

Hedging (use of tentative language) is yet another important feature of academic writing which requires much attention. This discourse strategy is widely known for its critical role played in academic writing (Hyland 6, Avkhacheva, Barinova, Nesterova 496, Gherdan 124 and others) as it enables doctoral students to present their opinions and state scientific claims in a more neutral, cautious or softened way to the academic community. Therefore, certain hedging devices, (which are much more complex than modal auxiliary verbs, concessive conjunctions, adverbs, lexical or epistemic verbs), should be examined in more detail. Therefore particular attention should be paid to more complex structures like hedging by negation: *this statement does not deny that* or by impersonal or passive constructions which enable certain distance: *it has been suggested, it is known to be, it could be implied, it is worth noting* or by discourse epistemic phrases: *some specialists argue, one aspect of the utmost importance, that* clauses: *it could be the case that, there is some evidence to suggest that* and others.

By far the most challenging task of an ESP teacher is to build doctoral students' self-esteem and self-confidence regardless of their age or background, as these are essential factors in articulating knowledge, motivating them and increase success rate. It is common knowledge that those who feel confident have the upper hand and achieve more, while those who are introverts with low self-esteem may achieve excellent research results but fail to disseminate them properly, that is why the psychological dimension is of the utmost importance in order to succeed in a doctoral program. With regard to this aspect, ESP teachers should fill one of their multifaceted roles, *as skilled advising at the graduate level should not happen by chance* (Cassuto, Weisbuch, 28), doing their best at providing and applying innovative ideas and effective ways to help students engaged in the doctoral program manage their anxiety of delivering oral presentations, improve public speaking and communication skills, control emotions and overcome barriers.

Despite the fact that the majority of those interested in the doctoral experience are highly skilled students, researchers or even professionals with long experience, there are however certain blockages or barriers they face, which if not properly understood in order to overcome them, can hinder progress or may lead to early withdrawal from the programme. Specialists speak about two types of barriers to the successful completion of a doctoral degree: *cognitive barriers* and *affective barriers* (Loyd, Harding-DeKam, Hamilton 3). Their findings identify five types of cognitive barriers to

success, which can trigger anxiety: *fragmented learning experiences*, mainly caused by the lack of continuity across the courses and learning about new areas of research; *limited procedural theoretical knowledge*, related to the difference between the declarative knowledge (a student is aware of knowing certain facts and data) and procedural knowledge (how that students applies knowledge in order to do something); *cognitive dissonance*, which is triggered by the inconsistency between what a student believes is right and what is actually true, *lack of academic writing experience*, generated by insufficient writing skills, and *a focus on the dissertation as an end product rather than as a process of learning how to be a researcher and a scholar*, whereas *affective barriers* are related to *isolation* and *loss of identity* a student may experience throughout this endeavour (Loyd, Harding-DeKam, Hamilton 3-15).

We have always advocated for the counsellor role that should be played by the ESP teacher, in an attempt to enhance students' capacity to cope with anxiety, to develop their reflective thinking, creativity and spontaneity and to respond well under pressure, while broadening the range employability skills and personal attributes. Even if doctoral students are mature students, they still need motivation and support from teachers, advisors and staff in order to enhance their ability to reach academic goals (Regis 11). In this respect, universities organizing doctoral studies should be equally concerned with students' academic well-being and personal growth in a sustained attempt to reduce attrition rate, increase retention and successful completion rates.

Conclusions

Non-native English graduates are faced with many challenges when they enter a doctoral program and some of these concerns are indisputably related to language proficiency. Since they may master the specific vocabulary related to their topic of research, they might be interested in expanding key academic vocabulary in order to communicate effectively whether they exchange information or deliver formal conference presentations to the scientific community. Once this linguistic hindrance is overcome, they may focus on acquiring specific competencies as well as research and academic skills and on developing certain transferable skills (such as communication, project management and networking among others), which are highly needed not only for making original contributions needed for the completion of doctoral studies but also for their future careers.

It should be pointed out here that one of the main tasks of the ESP teacher is to equip doctoral students with the skills they need for the

excessive competition they are about to face in the future, whether they choose a career in research or a career in academia.

The present paper attempted to shed light on the main objectives an English course for doctoral students should focus on in order to best meet their real needs. We acknowledge that there is a gap in the literature and, undoubtedly, this topic requires further reflection and discussion. It is a well-known fact that ESP teachers are in constant pursuit of updated materials for their students. They strive to find the ultimate solution and to tailor the available materials to meet the specific needs of their students, in an attempt to reach the final goal, that of being of real use to their students.

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