HOW TO IMPROVE THE ACADEMIC LITERACY OF SUBJECT TEACHERS – A NEW CHALLENGE FOR AN ESP INSTRUCTOR

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Abstract
Research cooperation, internationalisation of the curricula, knowledge transfer, as well as, staff mobility require academics to improve their academic literacy in English. The paper highlights the challenges an ESP instructor may face in the case of an Academic Writing course for the subject teachers of various disciplines. It investigates the main characteristics of research article as a genre and also gives insight into the teaching methods of how genre-specific language use may be acquired by subject teachers regardless of their disciplines.

Keywords: *internationalisation of higher education, English for Academic Purposes, academic literacy, genre-specific language use, research article as a genre.*

Abstrakt:
Spolupráca vo výskume, internacionalizácia kurikúl, prenos vedomostí, ako aj mobilita vysokoškolských pracovníkov vyžaduje, aby si vedeckopedagogickí pracovníci zlepšovali akademickú gramotnosť v anglickom jazyku. V príspevku sa kladie dôraz na úlohy, s ktorými sa môže stretnúť vyučujúci odbornej angličtiny v prípade predmetu akademické písanie, určeného pre učiteľov predmetov rozličných disciplín. V príspevku sa skúmajú hlavné charakteristické znaky vedeckého článku ako žánra, detailne sa zobrazujú metódy vyučovania, ktoré umožnia, aby si učitelia odborných predmetov osvojili schopnosť používať príslušný žáner v danom jazyku bez ohľadu na svoju odbornú špecializáciu.

Kľúčové slová: *Internacionalizácia vysokoškolského vzdelávania, angličtina pre akademické účely, akademická gramotnosť, používanie jazyka z aspektu žánra/žánrovo podmienené používanie jazyka, výskumný článok ako žáner.*

Introduction

It is a well-known fact that by the 21th century English has become the world's predominant language of research and scholarship. As a result, now more than 90 per cent of journals in some scientific domains are printed in English and the most prestigious and cited ones are in English. Due to the global internationalisation process in higher education with universities attracting a diverse student population, English has become the leading language for the dissemination of academic knowledge. This also imposes a high demand on academics to develop their competence in English (Hyland, 2006).

As second-language academics often lack confidence in their ability to meet standards expected by publishers, EAP also plays a role in developing their rhetorical skills in order that they will be aware of using the adequate style and form when publishing their research.

These days, non-native English-speaking academics using English as a medium of instruction in non-English-speaking countries like Hungary are largely exposed to the professional and institutional expectations in the same way as academics in English-language-speaking countries. Therefore, it is utmost important to notice and analyse their needs and start programmes that seem to fulfil their particular requirements. The course Academic Writing at Széchenyi István University, Győr may be regarded as a new initiative to fill the gap between non-native academics' language skills and institutional expectations with regards to research activities in international environment.

Academic Writing – course background

Academic Writing as a new course for the subject teachers of various disciplines has been designed for academics from various faculties who are actively involved in scientific research and aim to report on their results in English. The University's involvement in the project "Enhancing the role of Higher Education Institutions in Research, Development and Innovation" funded by the Széchenyi 2020 Programme of the Hungarian government and the EU's Structural Funds serves as a background for the course as it aims to encourage scientific research and publication activities and switch the institution into the internationalisation process of higher education institutions.

The participants of the course already have a scientific track record and start at B2+ or C1 level of English. Some of them have also attended courses in general English to develop their language skills. The course participants' disciplinary background involve two of the broad areas disciplines can be slotted (1) Science, Engineering and Technology like Agricultural Engineering, Environmental Engineering, Electrical Engineering, Physics, Applied Mathematics and (2) Social Science like Regional Sciences (see more on the division of disciplines Gillet, et al.,2009, p. 4).As these broad areas largely differ from each other, the course imposes a challenge for the ESP instructor who has to find some common ground to design the curriculum for the heterogeneous group and to investigate what fields of Academic English to include in the course material. The course content is based on needs analysis that was carried out by completing an EAP needs form regarding writing skills (www.uefap.com) and conducting a personal interview. As a result, the course, first of all, focuses on research article as a genre supplemented by conference calls, submission letters and response to the reviewers. In addition to practical issues like needs analysis, theoretical questions on EAP were also taken into consideration.

Theoretical approaches to EAP

Academic Writing may be regarded as a major component of English for Academic Purposes, which as a branch of ESP together with English for Occupational Purposes (Hutchinson and Waters, 1987) has undergone a great development over the past 30 years. In its broad sense EAP covers all areas of academic communicative practice including undergraduate and post-graduate teaching, classroom interactions, research genres, student writing, administrative practice assisting learners' study and research (Flowerdew and Peacock, 2001). However, it is more complex than that since it is the language teaching profession's response to the needs of non-native academics and students and to the distinctiveness of disciplinary communication (Hyland, 2006).

EAP also raises the question whether teaching should focus on general or specific EAP. Although there are several arguments for and against both versions, the author of the paper agrees with the belief that in heterogeneous groups where non-native students or academics are from different disciplinary background EAP courses should focus on a common core – a set of language forms or skills that are found in nearly all varieties. This belief is also underpinned by the fact that most EAP textbooks are based on this notion (Hyland, 2006), and EAP teachers should teach *"general principles of inquiry and rhetoric" (Spack, 1988, p. 29) and the common features which "characterise all good writing"* (Zamel, 1993, p. 35).

Another issue is who should be responsible for teaching EAP. A language teacher as an applied linguist would be able to specialise in General EAP having enough experience and intuition about students' language needs. As far as subject-specialists are concerned, even if they have expertise in their disciplines, they often lack a clear understanding of what role language plays in their disciplines. Lea and Street (1999), for instance, have found that subject tutors see academic writing conventions as largely self-evident and universal, and do not usually even spell out their expectations when setting assignments.

According to Hyland (2006) the ideal case would be if EAP professionals were concerned not simply with teaching isolated words, structures, lexical phrases and so on but with exploring the uses of language that carry clear disciplinary values as a result of their frequency and importance to the communities that employ them. However, institutions may have difficulty implementing this Special EAP approach due to a lack of experienced and enthusiastic staff.

Genre in EAP

Teaching academic literacy in terms of EAP is based on different oral and written genres. In linguistic literature there are various approaches of how to characterise genres. One way of doing it is in terms of the ways broad social purposes are systematically linked with context through lexical and grammatical features (Christie and Martin, 1997). Researchers working within Halliday's (1994) Systemic Functional Linguistics (SFL) model define genres by internal linguistic criteria, grouping texts which have similar formal features. Spoken and written genres are seen as narratives, recounts, arguments and expositions, and each genre is composed of a series of stages which contribute to the overall purpose of the genre. Defining genres in this way shows how frequently recurring linguistic patterns, or elemental genres (Martin, 1992) combine to create more specific macro-genres.

Research article as a genre is most of the time the combination of descriptive writing as it includes defining a topic and describing an object, system or process and writing critically because it also involves analysing and evaluating the author's own and others' work and presenting a point of view which the author may support.Thus it might comprise several elemental genres such as an exposition, a discussion and a rebuttal.

A research article is the culmination and final product of an involved process of research, critical thinking, source evaluation, organization, and composition. Primary and secondary sources are the heart of a research paper, and provide its nourishment. The research paper serves not only to further the field in which it is written, but also to provide the author with an exceptional opportunity to increase knowledge in that field (Baker et al., 2011).

A research article is organised to meet the needs of valid publication. It is, or it should be highly stylised, with distinctive and clearly evident component parts.The most common labelling in the basic sciences is introduction, methods, results and discussion (hence the acronym IMRAD). Actually the heading *"Materials and Methods"* is more common than the simpler "Methods" but the latter form is used in the acronym (Day, et al., 2012).

Academic Writing - course content

The content of the course reflects both the outcome of the needs analysis and the ESP instructor's theoretical considerations on EAP and genre analysis. As academics are most of the time assessed by the academic discourse community through their written work, participants should also be made aware of the importance of developing their academic literacy when disseminating their research and cooperate at international level; therefore the genre research article (RA) has become the focus of attention. In the case of subject teachers with a proven track record the ESP instructor's task is eased by the fact that applying strategies like using the appropriate structure for a paper and being critical is a skill that has already been acquired by the course participants in their native language. The main problem they may face is related to using the appropriate style.

Academic style may be characterised by the use of formal vocabulary, passive voice and cautious language where the evidence presented by the author may not be stated as conclusive enough. As a result, authors should be made aware of different linguistic patterns they may choose from to express caution.

In general, written academic language is objective rather than personal. Therefore, it has fewer words that refer to the writer or the reader. This means that the main emphasis should be

on the information authors want to give and the arguments they want to make. Critical writing embodies the analysis and comparison of theories, results on the basis of which the author may make a decision and come to conclusion.

Academic writing should also focus on how ideas within sentences are connected and how sentences are linked within a paragraph. This requires the proper use of signalling words with reference to addition, cause and effect, contrast, condition, contradiction, emphasis, examples, evidence, generalisation, time order and conclusion. Taking all this into consideration the content of the course includes the following topics:

Table 1: Academic Writing – course description

1.	Academic style, common mistakes in Academic Writing, RA as a genre
2.	Writing abstracts and introductions
3.	Describing methods, referring to literature
4.	Discussion, Comparing and contrasting, nouns and verbs relating to cause and effect
5.	Describing and reporting results, describing charts
6.	Writing conclusions
7.	Cautious language (hedging)
8.	Vocabulary for essays: attribution, endorsement, conjunctions, modality, evaluation
9.	Conference calls, Submission letters, Response to the reviewer
10.	Summarising, verbs of reference
11.	Summarising, punctuation
12.	Writing a RA in the relevant field

Source: own Compilation

Teaching method

Teaching primarily focuses on the genre-based approach. The ESP instructor has prepared a corpus of research articles according to the disciplinary field of the participants. The relevant articles were downloaded from the following journals available on the website ScienceDirect.
-   Agriculture and Agricultural Science
-   Computers and Electrical Engineering
-   Ecological Engineering
-   Environmental Development
-   European Journal of Mechanics
-   Journal of Mathematical Analysis and Applications
-   Physics Procedia
-   Regional Science and Urban Economics
-   Water Science and Engineering

The topics of the sample articles usually reflect the research interest of the individual course participants. First, the general features and the structure of research article as a genre is dealt with, it is then followed by an in-depth analysis of the separate parts. For example, in the case of Introduction, learners are informed about the role of Introduction and presented introductory phrases and expressions that can be generally used in introductions; then they are asked to use some of them forming sentences in their subject fields. This is followed by presenting various samples from discipline-specific journals. The samples are analysed to raise awareness of language use. As home assignment, participants are requested to prepare the

introduction part of some of their current research or rewrite the introduction of some previous one in accordance with the acquired language use. The prepared versions are discussed in the following lesson. The other components of RA are tackled in the same way. Grammatical issues are integrated into genre-analysis. Together with the discussion part of the RA expressions for comparing and contrasting, as well as, phrases for cause and effect relationships are also highlighted. When describing results and conclusion cautious language (hedging) is investigated and the language of describing graphs is at. In this way, linguistic forms are not separated from their communicative functions.

The sample texts are also ideal to visualise both general and subject-specific academic vocabulary. As the samples embody various disciplines, awareness is raised of how to use general academic vocabulary. The following extract shows an example of how the general vocabulary of RA may be drawn attention to when dealing with the Method part:

Material and Methods
2.1. Laboratory measurements
Measuring soil hydraulic properties in the laboratory with classical methods (sand box, sand-kaolin box, pressure plate extractor, multi-step outflow method) is time consuming and the results are strongly influenced by uncertainties (Dane and Hopmans, 2002; Bitelli and Flury, 2009). The Extended Evaporation Method (EEM) enables the simultaneous quantification of the water retention curve and the unsaturated hydraulic conductivity function of 100 cm3 or 250 cm3 soil samples in the laboratory (Schindler et al., 2010a, Schindler et al., 2010b). The measurement ranged from saturation down to near permanent wilting point and the measurement time is strongly reduced. Instead 2 or 3 month only between 3 and 10 days are required. Additionally, the quantification of shrinkage and hysteresis is possible (Schindler et. al., 2015a; Schindler et al., 2015b). (Agriculture and Agricultural Science Procedia11, 2016, pp.14 – 19)

Dealing with formal letters (conference applications, submission letters, response to the reviewers, participants are also informed about the most common reasons why editors may reject a paper. These may involve both technical reasons (e.g.incomplete data, poor analysis, inappropriate methodology, weak research motive, inaccurate conclusions) and editorial reasons (e.g.out of scope for the journal, research ethics ignored, violation of publication ethics, lack of proper structure, poor language quality), where the latter ones hint at the lack of or improper academic literacy (www.springer.com). Similar thoughts have been drafted by one of the major providers of scientific, technical and medical information, Elsevier, which draws submitters' attention to the fact that papers are rejected if the English is not sufficient for the peer-review process, moreover, if the paper is incomprehensible, i.e. the language and the figures are so poor that the merit cannot be assessed (www.elsevier.com).

The above-mentioned facts also impose high requirements on the ESP instructor. The expectations that can be easily met by an applied linguist in charge of such a course include the knowledge of general academic genres, the most common research methods, academic style, writing critically, appropriate linguistic patterns, general academic vocabulary, cohesive devices or discourse markers and the differences between L1 and L2. At the same time, ESP instructors are unlikely to be experts of subject-specific knowledge, discipline-related vocabulary, discipline-specific genres or research methods. They may not be responsible for evaluating discipline-specific content, either. In spite of all this, their contribution to academics' skills development may seem enormous since their activities enhance the publication of academic research in English adding to the international reputation of their higher education institution.

Conclusion

The paper has given an overview of how non-native academics' academic literacy can be developed in a group of L2 learners with different disciplinary background. The challenge an ESP instructor meets may only be overcome by thoughtful considerations with regards to the relevant EAP literature and participants' needs. As there is no one "fits for all" course book, the success of the course depends on the mutual cooperation between the ESP instructor and the L2 learners. Academics may also motivate each other in terms of development, which may further be enhanced by the detailed evaluation of the home assignments. Exaggerated demands regarding discipline-specific issues may not be imposed on ESP instructors who may rather be regarded as initiators and motivators. It is L2 academics who should take the role of implementers.

References

BAKER, J. R., BRIZEE, A., VELÁZQUEZ, A. 2011.*Genre and the Research Paper.* Available: https://owl.english.purdue.edu/owl/resource/658/02/

CHRISTIE, F., MARTIN, J. R. (eds.) 1997. *Genre in institutions: social processes in theworkplace and school.* New York: Continuum.

DAY, R. A., GASTEL, B. 2012. *How to Write and Publish a Scientific Paper.* Cambridge: Cambridge University Press.

FLOWERDEW, J., PEACOCK, M. (eds.) 2001. *Research perspectives on English for Academic Purposes.* Cambridge: Cambridge University Press.

GILLET, A. *Using English for Academic Purposes.* Available: http://www.uefap.com

GILLET, A., HAMMOND, A., MARTALA, M. 2009. *Inside Track.Successful Academic Writing.* Harlow: Pearson.

HALLIDAY, M. A. K. 1994. *An introduction to functional grammar.* London: Arnold.

HUTCHINSON, T., WATERS, A. 1987.*English for Specific Purposes.* Cambridge: Cambridge University Press.

HYLAND, K. 2006. *English for Academic Purposes.* London & New York: Routledge.

LEA, M., STREET, B. 1999. Writing as academic literacies: understanding textual practicesin higher education.' In: *CANDLIN C. N., HYLAND, K. (eds.) Writing: texts, processes and practices.* Harlow: Pearson.

MARTIN, J. R. 1992. *English text: system and structure.* Amsterdam: Benjamins.

SPACK, R. 1988. Initiating ESL students into the academic discourse community: how far should we go? In: *TESOL Quarterly*, 22 (1), 29 – 52.

ZAMEL, V. 1993. Questioning academic discourse. In: *College ESL*, 3, 28 – 39.

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