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Planning needs analysis research for international students in higher education

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Research-informed language education has been a valued trend in English for Academic Purposes (EAP) around the world (Hyland, 2014; Purpura – Graziano-King 2004; Akyel – Ozek, 2010; Rao, 2014) and in Hungary (Sárdi, 1997; Édes, 2008; Doró, 2011; Prescott, 2008). EAP instruction for international students in higher education in Hungary, however, is a fairly new phenomenon (Lannert, 2018). Due to the growing number of international students studying in Hungarian higher education institutions, faculties have started to feel the need for systematic attention to students' skills development. As part of a larger research effort to provide course design, materials development and recommendations for language teachers and subject matter instructors, an inquiry into the current situation at the Budapest University of Technology and Economics (BME) was initiated recommended by previous practice (Hyland, 2014, Purpura - Graziano-King, 2004). The paper describes the stakeholders and the background of EAP instruction at BME, the initial identification of data sources, methods of data collection, and preliminary data analysis to inform the next step of the larger research effort. Results will inform the needs analysis instruments to be used to identify the required learning outcomes, the respective language content for the course design and materials development, and the recommendations for teachers involved.

Keywords: EAP, needs analysis, international students, higher education, research-based language education

Introduction

This paper describes the process of starting a greater volume of research work in the field of teaching English, more specifically English for Academic Purposes (EAP), to international higher education students in Hungary. The research stems from practical everyday teaching experience at the Centre for Modern Languages of the Budapest University of Technology and Economics (BME) where the number of international students has increased dramatically over the past few years. This surge has brought to light a number of issues at the level of all stakeholders, whether they are students, instructors or members of the university management. The concerns relevant for the Centre pointed to a need for a systematic inquiry into how to improve the English language skills development of international students, catering to their needs to assist them in performing to their best abilities during their studies.

As the Centre had always insisted on high quality language instruction, it was decided to take a research-informed approach to improve the English language instructions for international students at BME (Hyland, 2014; Purpura – Graziano-King, 2004; Akyel – Ozek, 2010; Rao, 2014). However, after an initial inspection of the literature, it became apparent that there is a lack of systematic inquiry into the topic of teaching EAP for international higher education students in Hungary specifically (Sárdi, 1997; Édes, 2008; Doró, 2011; Prescott, 2008; Lannert, 2018).

Thus, this paper intends to contribute to the field of teaching EAP to international student in a Hungarian higher education setting by establishing a needs analysis to identify required learning outcomes for EAP courses. The learning outcomes would form the basis for improving the course design and materials development, as suggested by Hyland (2014) and Purpura – Graziano-King (2004). It would also provide recommendations for language instructors teaching international students in Hungary in order to support both students and their teachers, as Lynch (1994) had already suggested was necessary.

Context

The Hungarian Government has put forward a growing effort towards the internationalization of higher education in its goals both for 2014-2020 and beyond. The wider scheme of internationalization includes the Stipendium Hungaricum (SH) programme founded in 2013 (Lannert, 2018). It was established in order to promote cultural and economic relations as well as cultural understanding between Hungary and currently 65 other countries around the world, enabling students to participate in full-time Hungarian higher education programmes at all levels. It allows international students to study for free in Hungary, either in English or Hungarian, with a monthly stipend and dormitory provisions or contribution to accommodation costs. As a result, students from Asia, Africa and the Middle East have been coming to study in increasing numbers to BME. The number of all accepted international students rose from 973 in 2015 to 1445 in 2020, out of which SH students were 85 in 2015, and 806 in 2020. Currently about 10% of BME students are from abroad, 56% of which are SH students.

The Centre for Modern Languages at BME has been providing general and specific language instruction at all levels to Hungarian BME students for more than 20 years. In addition, it has developed and operates an accredited language examination system whereby several thousand Hungarian citizens, not only BME students, take the state-accredited language exam needed for their degrees or career advancement every year.

As the number of international students studying at BME had been increasing, several faculties have turned to the Centre with requests to help international students improve their English language skills so that they could successfully complete their studies. Over the years the Centre has provided English language courses for international students in the preparatory, bachelor, master and doctoral programs, and in some cases for instructors of faculties involved in teaching international students. By fall 2020, all faculties of BME were involved and there were 347 SH students enrolled in English courses, whereas this number was only 113 in 2015.

The increased demand from faculties towards the Centre has put the language instructors in a unique position as they meet students from all the faculties of BME. This has made it imperative to investigate the case of teaching international students in a systematic way so that the Centre can continue to provide top-level professional service for the students by identifying learning outcomes that are specifically language oriented, and other areas that might need attention, if the overall educational experience of international students at BME should be improved.

As the English language instruction of international students has been on-going for a few years at BME, language instructors and faculty teachers have accumulated a certain amount of anecdotal evidence as to what issues there might be with international students. For example, it was reported that students do not know enough English even though there are language requirements at admission. The Centre's own placement tests at the beginning of courses confirmed the wide range of knowledge of students irrespective of their language certificates sometimes. Furthermore, it was claimed that students do not know how to write formal emails and appropriately address professors. Another issue was that students avoided asking questions for clarification directly in lessons; instead they approached teachers after the lesson, which resulted in the teacher explaining things twice in full, as opposed to focusing on only problematic segments during the lessons. In addition, it was also reported that there seem to be very strong national and individual differences in learning techniques, such as note-taking skills or grasping the essence of lectures and reading materials. These were deduced problematic from exam performance of students, irrespective of whether the format was written or oral. Finally, faculty teachers have reported a huge diversity in the educational background of students, such as what concepts are taught or not taught to them at a secondary level. In some cultures, notions such as per mille (%) are not included in primary and secondary educational materials. However, in Hungary this concept is taken for granted for freshmen university students.

All in all, a the picture formed from the anecdotal evidence of language instructors and faculty teachers showed that the skills of international students, both in English and in subject matter issues, are very diverse. Slowly it became apparent that collecting and structuring existing experiences was needed in order to detect any patterns in the anecdotes so that the research-informed learning outcomes, course design and materials development may be identified and implemented.

Methods and preliminary literature review

To establish a framework for a systematic inquiry, the everyday practice of actual teaching was performed in parallel to the exploration of the theory of English teaching methodology for international students, essentially defining the investigative approach as participatory action research (Crookes, 1993, Nunan, 2013, Creswell, 2007; Burns, 2011). This meant an exploration of issues in a continuously extended spiral form. Moreover, it also meant that facts taken for granted, such as a minimum language requirement at admission for instance, had to be systematically overviewed and examined. Only a research approach going back to 'ground-zero' could ensure that nothing slipped attention, and all forms of data were taken into consideration when drawing conclusions for a needs analysis survey for teaching English to international students at BME, improving course design and advancing materials development.

The literature consulted initially included the areas of teaching international students in higher education and training teachers for teaching international students in higher education (Lynch, 1994), teaching EAP in higher education institutions (Hyland, 2014), course design theory (Dubin – Olshtain, 1986), identifying learning outcomes in higher education (Farkas, 2017; Tam, 2013), needs analysis in EAP in higher education in general (Balint, 2004; Hinkel, 2011; Hyland, 2014) and for students of technology (Akyel – Ozek, 2010; Balaei – Ahour, 2018; Briana – Briana – Lynn – Mutia, 2019) in particular.

Further investigation during the wider needs analysis survey is required, but a number of issues stood out. Firstly, there is a lack of research into EAP for international students in higher education in Hungary whether in general or for technology. Thus, a research-based thorough needs analysis and curriculum development for EAP courses for international students is highly relevant.

Another issue highlighted in the literature was the need for EAP courses for international students to counterbalance the misconception that obtaining a certain level of language exam covers the knowledge that is

required to successfully complete university studies, whereas in reality academic English has its own linguistic characteristics irrespective of international language exam levels (Hyland, 2014). In fact, international students at BME can only be accepted if they have some kind of certificate at the CEFR B2 level or equivalent (http://studyinhungary.hu/study-inhungary/menu/find-a-study-programme/study-finder.html), yet the faculty teachers' anecdotal evidence implied that for the successful completion of academic studies their entry level English knowledge does not seem to be enough.

Furthermore, the literature also highlighted that teaching international students should follow a different methodology (Lynch, 1994) than teaching students from the same cultural background and mother tongue as their teacher's, as several factors may influence the learning process and outcomes, such as mother tongue, educational background, or cultural preconceptions of teacher-student relationships.

Finally, another idea was that subject matter instructors have a major role as conveyors of the host academic /national culture, and as long as they do not accept this responsibility going hand in hand with their job of teaching international students, a communication gap will exist (Airey, 2012) that will hinder creating a motivating learning environment at universities.

Initial data collection and results

The first step in basing the needs analysis of English instruction for international students and further changes to course design based on scientific foundations was to establish the present situational elements (Dudley-Evans and St John's, 1998; Hyland, 2014). Several rounds of data collection were carried out to structure the anecdotal experiences of students, language instructors and faculty teachers, thus employing both direct and indirect forms of needs assessment (McCawley, 2009).

In the first round, at the end of the English courses for two faculties (Electrical Engineering and Chemical Engineering) in fall 2019 and spring 2020, students were asked to evaluate the perceived usefulness of the English course through questionnaires. The sample was small (n=36) and chosen through convenience sampling (Dörnyei – Taguchi, 2010). Open-ended questions targeted general ideas, such as 'What elements were useful? What would you keep/change? What else would you need to succeed in your studies at BME?'

In the second round of data collection, language teacher experiences were investigated in informal interviews in professional meetings and workshops throughout the educational year of 2019/2020. The sample (n=8)

included those teachers who had taught or were teaching English to international students. Questions included open-ended inquiries, such as 'What have you noticed? What are their problems? Language-wise or otherwise?' to allow for self-reflection on their experiences and provide further opportunities to follow-up any issues as they emerged.

Finally, in the third round of initial data collection, faculty instructors and/or leaders responsible for international student education were interviewed through an email-based questionnaire in the spring and summer of 2020. As a result of the format, the sample includes four faculty leaders responsible for international students, and 19 instructors from the faculty of Electrical Engineering. The questionnaire contained five umbrella questions to unearth major problem areas.

Results for the initial data collection showed that students did not see the need for English instruction in general, though they conceded that they should learn more subject matter vocabulary and need improvement in scientific reading and writing, note taking, presentation, thesis/research article structure, and summary writing. Further student insights were problems in communicating with professors and other students, and a desperate need to have more contact with local Hungarian students.

Language instructors expressed that students seem to know enough to communicate and manage general life situations, but they can definitely improve in academic vocabulary and register. They felt there is a need for English instruction but with a special focus.

Faculty teachers' answers focused on the lack of vocabulary of students, but expressed that they do teach those to them, so language instruction should not focus on those. Other issues mentioned were email formalities and run-on sentences, that is structuring thoughts according to expectations in English.

A limitation has to be mentioned here. It seems that the faculty teacher questions focused rather on the target situation and the subject matter learning outcomes as opposed to uncovering the present situational elements (Dudley-Evans – St John's, 1998; Hyland, 2014). The questions in hindsight seem to provide answers which are too vague, focusing on subject matter issues not necessarily language ones or ones that would require such subject matter knowledge that language teachers do not have, nor does it belong to their expertise. In the next steps of the needs analysis research there are two options for identifying the present situation elements from the faculty teachers. Option 1 is to ask different questions focusing on language issues (e.g., would you say your students have problems expressing the present, past, procedures, vocabulary, pronunciation or behave incorrectly/differently than

what you expect of them?) and option 2 is to interview them in groups to find out what poses problems for them when teaching international students.

To sum up, when the anecdotal evidence was rounded up in the more systematic initial inquiry, several broad issues for the Centre emerged. Firstly, the Centre still has room to improve the level of general language knowledge of international students in all skills. Although their language knowledge is more than enough for most walks of life, studying at university requires specific skills and linguistic knowledge elements. Stemming from this fact, there are specific structural elements of the subject matter learning material and university life in general that means more work on specific vocabulary and register issues. Secondly, therefore, there is an urgent need for English for Academic Purposes (EAP) courses, not only general skills development courses, for international students. Thirdly, in order to ensure the success of the English instruction raising awareness of the need for EAP among international students is vital to maintain their motivation for learning. Without clear reasons for why learning is needed, motivation plummets and makes cooperation and achievement very hard (Dörnyei – Ushioda, 2010).

The remaining issues that are seen in the anecdotal evidence and the initial data collection phases seem to belong to categories other than language skills. There appears to be a need for intercultural sensitizing, where international students need to understand more consciously that they are the adjusters in a new home, new national culture and a new organizational culture. However, all instructors also have to realize that whatever they do, they will be representatives of and bridges to a host culture, whether on a national or an organizational level (Airey, 2012). As such, they must become supporters of the adjustment of international students (Nemetz-Robinson, 1985), take the necessary time and effort to clarify expectations with explanations, and must accept this additional role to being subject matter instructors.

Further steps in planning large scale needs analysis research

The results of initial data collection analysis stemming from the anecdotal experience have been supported by literature. Thus, there should be research-based language instruction, curriculum design and materials development (Hyland, 2014) at the centre for Modern Languages at BME for international students. This needs to involve identifying learning outcomes (Farkas, 2017) in the traditional educational grouping of knowledge, skills, and attitude (Bloom, 1956), but focusing on communicative needs such as the participants and purposive domain (e.g. IT), the setting of education (time and place), the types of required interaction (roles), the instrumentality, namely the types of

medium and channel the education is done in, the possible dialect, the target level, the communicative events (lecture or seminar), the communicative key (e.g. formal/informal, attitudes), and the profile, that is, what students need to be able to do (Munby, 1978, cited in Gillet, 1989). The non-linguistic elements of the data so far points to the need for significant learning involving study skills and empathy development (Fink, 2003). Furthermore, stakeholders need to be extensively supported in order to establish, maintain and navigate communication successfully with each other (Lynch, 1994; Airey, 2012) whether they be international students, faculties, subject matter instructors, language teachers, or International Alumni program developers and managers.

According to the process proposed by McCawley (2009) and Dörnyei – Csizér (2012), the aims of the needs analysis (who needs to know what), the target audience (international students, the Centre for Modern Languages, faculties of BME), and the type of data collection to be employed (both direct and indirect as both student questionnaires and teacher interviews will be used) have so far been established. The remaining steps in the process of the needs analysis of international students in higher education at BME are to specify and formulate the actual research questions for a large scale study, decide on the sample, finalize the instruments for data collection to include both linguistic and non-linguistic elements, collect the data and carry out the analysis. The analysis should separate any linguistic and non-linguistic needs and identify subgroups for both. Based on the results, it will be possible to formulate specific linguistic learning outcomes for EAP courses in general, and other learning outcomes for non-linguistic areas will emerge.

Finally, with learning outcomes in mind, the EAP curriculum design and materials development can be carried out for the EAP subjects depending on the length of courses or the specific needs of faculties.

Conclusion

This paper describes why a needs analysis study is underway at the Centre for Modern Languages of the Budapest University of Technology and Economics. It describes the everyday experiences of the university as the starting point, defines the theoretical background as that of EAP for international students in higher education in Hungary, and identifies the basis for the need of research-informed language instruction together with EAP curriculum design and materials development. Finally, it suggests the existence of non-linguistic needs' elements which also influence overall linguistic and study performance, such as intercultural sensitivity and level of study skills. The large-scale needs analysis will provide data as to what exact

learning outcomes need be identified both linguistically and non-linguistically to ensure the successful stakeholder cooperation.

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