

1 ESP in teacher education: a case study

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Abstract

The growing importance of global English has led to the rise of English for Specific Purposes (ESP) teaching, particularly in higher education. Despite the concurrently increasing demand for ESP teachers, pre-service teacher education programmes have largely neglected this important area. This study has been initiated to address the professional needs of future ESP teachers by designing an innovative ESP teacher education course in a teacher education programme in Turkey. The theoretical framework of the study is based on the constructivist perspective in order to help pre-service English teachers create meaning through their participation in various socialisation practices. The first part of the course was theory-informed to familiarise students with ESP-related topics, while the second part followed a practice-oriented approach. Data were collected through pre-and post-test open-ended questionnaires, student journals, and ESP projects. Content analysis was used to analyse the qualitative data. Findings underline the positive effects of the ESP course. Suggestions are offered for teacher education programmes.

Keywords: constructivism, English for specific purposes, pre-service teachers, teacher education.

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1. Introduction

With the effects of globalisation and an increase in the demand for qualified professionals in the 21st century, teaching ESP has started to draw greater attention. Currently, learners need courses to cater for their specific needs to serve the demands of the society. As a result, ESP has started to attract growing attention from policy-makers, course designers, teachers, and learners. Despite its growing importance, the field of ESP remains an unexplored territory in teacher education (Basturkmen, 2017). Teacher education programs in Turkey and many other countries do not always prepare prospective teachers with the essential knowledge and skills of how to teach learners with specific needs and purposes. It is acknowledged that unlike teaching English for general purposes, teaching ESP is demanding as it includes a range of tasks: identifying learner needs, developing courses and materials, as well as classroom teaching (Basturkmen, 2014; Hutchinson & Waters, 1987). Therefore, practising ESP teachers often require additional knowledge and skills.

The majority of studies in the ESP literature concern needs analysis, course design, materials development, and training practising teachers (Basturkmen, 2010; Belcher, 2006). However, little is known about how to prepare pre-service teachers for ESP professions (Hyslop-Margison & Strobel, 2007). This study aims to contribute to the literature by designing an ESP teacher education course in a teacher education programme in Turkey. After providing a theoretical perspective on constructivism, the methodology section presents the framework of the ESP course, participants, data collection, and data analysis. This is followed by a presentation and discussion of the research findings.

The epistemological foundations of constructivism and the theory's implications for classroom practice are laid down by Lev Vygotsky (1978) and John Dewey (1929). Vygotsky's (1978) theory of knowledge acquisition espouses the view that knowledge is socially negotiated in cooperation with others and that individual cognition acts as the generating force in knowledge construction. In a constructivist perspective, the learner is recognised as an active participant with prior knowledge and experience, which determines how new learning can be assimilated or accommodated (Hughes & Sears, 2004).

In the social constructivist pedagogy, the instructor holds a pivotal figure in the classroom through modelling and guided instruction. The instructor creates activities that help students adjust their conceptual understanding to advance beyond their present level of development to a higher level within the conceptual distance – the Zone of Proximal Development (ZPD) (Hyslop-Margison & Sears, 2006). In the context of ZPD, Vygotsky (1978) emphasised the vital role of imitation. As learners imitate teachers by watching demonstrations and responding to questions, they learn new ideas which exceed their present level of knowledge (Smith, 2001). Besides, in a constructivist classroom, teachers and students are regarded as co-constructors of meaningful interactions, and lecturing is seen as a pedagogically acceptable and valuable instructional tool when used in the proper context.

Dewey (1929) postulated that direct experience is key to learning in children who must start with direct, concrete real-life experiences to help connect learning to their world. Likewise, Smith (2001) noted that “novices of any age and of any subject matter benefit from direct [...] experience, [noting that] this can be effective if it includes ongoing, adequate, and focused guidance by a more experienced peer or teacher educator” (p. 223). The constructivist epistemologies of Dewey (1929) and Vygotsky (1978) offer useful implications in improving our understanding of the kind of experiences ESP teacher candidates confront when learning new knowledge, and they also offer useful pedagogical strategies for its classroom application in an ESP teacher education course.

2. Method

Situated within the constructivist paradigm, and using mainly qualitative inquiry as a research approach (Creswell, 2013), the study sought answers to the following research questions.

- How do the Turkish pre-service English language teachers perceive ESP and ESP-related issues prior to the ESP teacher education course?

- How do the Turkish pre-service English language teachers perceive ESP and ESP-related issues after participating in the ESP teacher education course?
- To what extent do the Turkish pre-service English language teachers feel prepared to teach ESP in their future profession?

2.1. Data collection and analysis

To address the above-listed research questions, data were collected from 60 pre-service teacher candidates enrolled in the ESP course offered in the spring semester in the third-year of the teacher education programme. Data collection tools included a pre-and post-ESP questionnaire which contained ten open-ended items administered both at the beginning and at the end of the 14-week course, reflective journals which participants wrote weekly, and participants' ESP projects. The qualitative data were subjected to content analysis.

Data from the pre-ESP questionnaire were examined to determine participants' responses to each question, and the post-ESP questionnaire was examined to decide on the degree of change, if any, in the students' responses to each questionnaire item. Qualitative data from the reflective journals were coded and analysed for patterns and themes corresponding to each research question (Creswell, 2013). The participants' written reflections on their ESP learning experience were used to support the emerging themes found in the questionnaire data, and ESP projects were used for illustrative purposes. Information from each student was recorded under a separate file, using a *pseudonym* for each participant such as Özge, Arda, Cem, Onur, Seval, Erdem, Salih, Kaan, İpek, and Mutlu.

2.2. Conceptual framework of the ESP course

The ESP course was comprised of two main components. The first part of the course (Weeks 1-7) involved imparting knowledge through lecturing, complemented with small group or pair-work tasks. In line with Dewey's (1929)

model of constructivism which situates the instructor as a classroom facilitator and Vygotsky's (1978) idea of modelling as relational initiation (Smith, 2001), students were assisted to construct epistemological knowledge of basic ESP concepts, such as needs analysis, materials design, and course design through lecturing.

Vygotsky (1978) argued that people acquire knowledge through two kinds of activities: among people, and/or within ourselves. Considering the implications of these ideas for learning, individual and group-work activities were designed as a constructivist pedagogy that would promote intrapersonal and interpersonal dialogue about ESP-related concepts. After lecturing each ESP topic, the researcher set up tasks to be performed in pairs or small groups to promote socialisation. The participants kept journals for the researcher to check on their learning processes. They also read articles and books (e.g. Basturkmen, 2006, 2010; Hutchinson & Waters, 1987) and watched videos based on a list of topics covered.

The second component of the course involved moving from theory to practice. Following Vygotsky's (1978) theories, interpersonal dialogue that started in the classroom between student teachers and the course instructor was then expanded beyond the classroom. During Weeks 8-14, fieldwork was incorporated as the ideal constructivist practice into the regular ESP coursework to give learners direct experience beyond the classroom setting. Participants were assigned to perform a collaborative project in groups to gain a concrete real-life experience and to help them connect classroom learning to the world of ESP. Based on their own interests, each group designed an exemplary ESP course on their preferred ESP domain, developed a lesson plan, and performed micro-teaching in the lesson.

Whereas the former part of the ESP course provided the learners with a substantial amount of ESP knowledge, fieldwork was supported by ongoing and focussed guidance by the researcher to enhance effectiveness of pre-service teachers' socially constructed learning experiences. Fieldwork was a cooperative learning activity followed by a group presentation by the whole group with individual group members making a personal contribution. In this way, incorporated into the lecturing mode of instruction were various social learning activities,

modelling, and direct experience, the basic concepts put forth by Vygotsky (1978) and Dewey (1929).

3. Results and discussion

In this section, findings from each research question are presented and discussed, supported by illustrative extracts from the questionnaires and student journals.

3.1. Turkish pre-service English language teachers' perceptions of ESP and ESP-related issues prior to the ESP teacher education course

Findings from the pre-test results and participants' journals revealed that prior to taking the course, most participants (96%) had no knowledge about ESP. This is illustrated by the following extract from Onur:

“Actually, at first when I heard of ESP, I didn't know what it was. I wondered what we'd be doing during this course. I hoped that it'd be a different experience for me. I was extremely curious to experience the process myself”.

Some participants hoped to experience something new and challenging, as reported by Mutlu:

“I had no idea about what ESP is before, but I tried to guess what it could be because ESP stands for English for specific purposes. Then I thought maybe we'd teach professional knowledge in English. Engineering department was the first thing that came to my mind. I have friends there and they mention their English course is not the same as general English. Therefore, I predicted that this course would be different from others”.

A minority of the participants (4%) appeared to have a general idea of ESP, as illustrated below by Arda:

“I knew that we’d study on specific purposes of learning/teaching English in different fields such as fine arts, medicine, engineering etc. From my point of view, it was going to teach me different aspects of English. Also, I was thinking that ESP course would help improve my teaching skills. Moreover, it’d raise our awareness towards English terms, phrases, etc.”.

3.2. Turkish pre-service English language teachers’ perception of ESP and ESP-related issues after participating in the ESP teacher education course

After completing the course, participants gained considerable knowledge on the fundamental components of ESP beyond their knowledge of English for general purposes, as illustrated below.

3.2.1. The meaning and origins of ESP

Seval expressed her opinion as:

“I’ve learned the origins of ESP. During 1960s, changes in the world resulted in the rising of ESP as a discipline. ESP is tailor-made because it focusses on the learners’ specific needs. In addition, ESP developed in order to meet the needs of the New World”.

Erdem provided a more detailed perspective:

“ESP does not focus on general English. It focusses on a particular field. For example tourism, business, medicine etc. ESP has a learning goal and the course is designed accordingly. It is learner centered. The main idea of ESP is to teach English in subjects that are needed for the students. This is really motivating for them because they can use what they have learned in the class in the real world. ESP students are generally adults”.

3.2.2. *Conducting needs analysis*

The next most important area of knowledge gained concerned needs analysis. The participants had a clear understanding about the need to conduct needs analysis as a basis of ESP course design. Salih stated:

“Thanks to the ESP course, I’ve learned the concept of needs analysis. I’ve learned that we should gather information about the learners’ target situation and find their objective needs. We should gather personal information about the learners such as wants, and subjective needs. We should know the learners’ lacks and gather professional information about how language and skills are used in the target situation”.

It is evident from these reflections that participants learned not only the steps in conducting needs analysis but also the instruments used for collecting information about the ESP learners. One student teacher, Cem, reported: “We learned how to collect information using questionnaires, interviews, and observations”. He added that needs analysis was his favourite topic and he felt confident about preparing and analysing a survey. When analysing survey results, he benefited from pie diagrams which he found enjoyable.

Another ESP group of students decided to conduct needs analysis for the mechanical engineering field. They reported that they created questions to identify ESP students’ needs, their background, and English proficiency. They used Survey Monkey to apply the questionnaire on-line. They reached 17 students and analysed the results. Finally, they saw that students have difficulties especially in listening and speaking.

3.2.3. *Materials design*

Participants perceived developing ESP materials as a unique experience. Özge reported that it was the best part of the course for her as she liked creating something new. She specifically stated “I tried to put myself into these ESP students’ positions while creating materials. I’ve gained knowledge and skill of

making a unit on foods and drinks for the food engineering field”. Participants also agreed that they became aware of the fact that ESP learners need tailor-made materials. Onur highlighted: “I have learned that not everyone learns English for the same aim and in the same way”. In the tourism and hotel management vocational high school he explored that students learn different terms specific to their field. With this awareness, he prepared an original ESP material in collaboration with his group friends, designed activities, and planned a lesson.

Student teachers recognised the need to conduct needs analysis prior to developing materials. Özge reported:

“Now, I know that I need to conduct needs analysis before starting to teach an ESP course. To state briefly, I learnt what I need to do to be able to run an ESP course in the future. It was an amazing experience in which we turned our theoretical knowledge into application”.

Student teachers also expressed a feeling of confidence in producing ESP materials, as reported by Kaan:

“I feel myself confident for conducting needs analysis, I can ask needed questions. I believe in myself that I can create an original ESP material for the intended courses thanks to my needs analysis. After learning what I need to do for them, I can teach them by doing my best”.

3.3. The extent to which the Turkish pre-service English language teachers feel prepared to teach ESP in their future profession

While recognising the diversity of the ESP field, participants agreed that they gained sufficient knowledge and developed skills to enable them to teach ESP in the future. Onur mentioned:

“Now that I understand the real meaning of ESP.. Knowing ESP as a candidate teacher. For example I can design a lesson plan for any

profession to teach English. I can teach English to people and decide on materials suitable for them”.

Student teachers became increasingly aware of the need to become more knowledgeable with regards to ESP, and building on their ESP knowledge and experience to deal with course requirements. One participant, Cem, believed that he could easily teach ESP in the future. He stated that he already had a degree in Computer Science, so teaching ESP in this field would be easy for him. He perceived other possibilities such as medical English as he previously studied physical therapy but dropped out of school for personal reasons. In general, students believed that thanks to knowledge and experience they gained in this course, they felt confident that they could easily adapt their teaching to different ESP teaching contexts.

Students admitted that in this project they mainly focussed on one ESP area, e.g. tourism or nursing. It would be unlikely that they would know all terms about any vocational area, but they would study hard to improve themselves. As Seval anticipated:

“Teaching ESP requires knowing specific terms for example electrical circuit components (capacitor, diode etc.). I know electrical terms. That’s why I won’t have problems in this field. But in other fields of study (medicine, tourism) I may have problems”.

Some students stated that they would have to refresh their knowledge in the future, building on their ESP teacher qualifications. Another participant, İpek, reported:

“I can teach English in an ESP context. But I’ll need to refresh my knowledge, terms, and vocabularies that are special to that field. Especially, I’ll need to learn students’ needs and lacks in learning English. I will also need to find different and helpful materials and activities that will make them active during the lessons. It can be much more challenging for me”.

All students expressed a high level of satisfaction with the ESP course. Cem said: “We’ve learned lots of things about ESP which will be useful in my academic life. I’ve learned that there are many fields beyond general English. Now I’m aware of my full potential. Learning all these ideas makes me feel like a real ESP teacher”. Another student, Salih, wanted to take advantage of it in the future. He reported: “Maybe, in future, I’ll need to teach ESP and it won’t be difficult for me thanks to this course”.

In line with the constructivist paradigm, preparing the ESP project gave participants a concrete real-life experience, providing them with first-hand encounters within authentic contexts to apply concepts and principles to a new situation. Özge commented that the most useful experience for her and her group of friends was to observe a real ESP lesson in the faculty of law which helped her “to understand ESP better”. Reflecting on her experience, she mentioned: “At the beginning of the process, I went to the Faculty of Law to observe the lesson of the ESP teacher”. She, then, “interviewed the teacher and the students and took notes”. While designing the ESP course, she considered students’ levels, their lacks, and needs. Next, she made a list of the topics related to law and produced materials for two lessons and presented it as a micro-teaching lesson. Another interesting aspect of this project was to integrate technology in the material. She added: “I used Word Cloud composed of the key terms. I found micro-teaching challenging and the appropriate materials made the lesson fun. It was an exciting and unforgettable experience”.

Belcher (2006) recognised that ESP teachers are specialists who are “often needs analysts first and foremost, then designers and implementers of specialised curricula” (p. 135). Similarly, student teachers in the present study recognised that an ESP teacher has many different roles, from course design to materials development. The following extract from Arda reflects the opinion of many students:

“ESP teacher should always be a learner because needs are always changing. ESP teachers should develop themselves because they are a role model. They should be innovative, a researcher, and be connected with students so they can know what their students’ needs are for learning

English. An ESP teacher should be a guide. Books are insufficient for teaching. So teachers should create new activities for students and encourage them towards the lesson. Knowing all these things makes ESP learning more effective”.

In summary, student teachers appeared to have confidence in their abilities to conduct needs analysis, develop materials (adapting and/or producing materials), prepare a lesson plan, and micro-teach it. They appeared to have the capacity of applying such knowledge in predictable future ESP teaching situations. Student teachers also expressed an interest in exploring ways to extend their understanding of the subject area in the future. Generally, literature on needs analysis is concerned with determining objectives (Belcher, 2006). Similarly, all students recognised the importance of pre-course needs analysis, as well as the need to tailor instruction to learners’ needs after a course has begun.

As it is evident from the section above, the present ESP course has provided an “understanding of abstract [ESP] concepts underlying practical [experience] in order to enable student teachers to adapt to novel situations and to apply their knowledge in [changing ESP] teaching contexts” (Hüttner, Smit, & Mehlmauer-Larcher, 2009, p. 100). Each ESP group, focussing on a different ESP topic, attempted to apply previously learned knowledge and experience to accomplish a particular goal or to solve a particular problem. At this point, and in line with Hyslop-Margison and Strobel (2007), pre-service teachers were engaged in a collaborative, real-life problem-based learning through project work, which is reinforced by the view that knowledge is essentially a socially constructed and negotiated product. During this fieldwork, pre-service teachers participated in expanded dialogue with ESP teachers and students to help them develop an informed but personal understanding of the subject. Findings from multiple sources suggest that through engaging in this type of dialogue, participants were able to construct a base of knowledge about the range of ESP topics, increase their awareness and competence on ESP-related topics, and that they developed an informed but personal understanding of the subject. As a consequence, they perceived themselves as well-prepared to teach ESP in their future profession.

4. Conclusions

Drawing on Vygotsky's (1978) concept of relational imitation and Dewey's (1929) notion of learning through direct experience, this study has presented a model for designing an ESP teacher education course for pre-service language teachers within the framework of constructivism. As noted by Hüttner et al. (2009), while so many English language teachers are working in the field of ESP, many new teachers are coming into the field too. These newcomers need to be given some ESP-related education in the teacher education programmes. It is therefore essential that ESP be taught in pre-service teacher education to prepare prospective teacher candidates for the world of ESP teaching professions. Findings gained from the implementation of this ESP course at a Turkish university suggest that the approach followed in this study could fruitfully be adapted to other teacher education programmes.

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