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The Constructivist Approach towards Identifying the Challenges of ESP Teachers: The Case of Aviation English

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The continuous growth of the aviation industry necessitates more qualified pilots and air traffic controllers (ATCOs) in terms of English language proficiency. Therefore, improving the quality of English for Specific Purposes (ESP) teaching appears to be a significant matter to meet such need. However, the existing literature on ESP lacks profound research on two crucial components: ESP students and teachers. As for the former, there is ample research highlighting several different issues such as ESP students' needs (Mazdayasna & Tahririan, 2008; Peters & Fernandez, 2013), achievement (Amiri & Fatemi, 2014; Özer, 2020), and anxiety (Amengual-Pizarro, 2018; Chen & Huang, 2016; Liu et al., 2011). However, for the latter, the research is limited to ESP teachers' needs (Basturkmen, 2019), roles (Ghafournia & Sabet, 2014), and training (Bezukladnikov & Kruze, 2012). In this sense, it can be argued that scarcity of ESP teacher research can be fatal in international settings, such as Turkey. In the last decade, more and more institutions have started to offer ESP courses in Turkey, specifically Aviation English (AE). As of 2020, there exist 13 Aviation Management programs offering associate degree; 16 Aviation Management programs offering bachelor's degree; 5 Pilotage programs offering associate degree; and 5 Pilotage programs offering bachelor's degree. Although AE has attracted more attention recently, there is shortage of qualified ESP teachers and not much is known about their in-class practices. Therefore, this study investigates this long neglected yet crucial issue of AE teaching experiences of in-service ESP teachers. To do so, it is of utmost importance to develop a good understanding of AE and ESP teaching setting in Turkey.

Aviation English

Aviation English (AE) is regarded as a language specifically used by pilots and ATCOs for the purpose of air traffic communication both in the air and on the ground. Crystal (1997, p. 109) called AE 'Airspeak' and defined it as a restricted vocabulary that has a fixed set of sentences which are used to express unambiguously all situations that could possibly occur. Also, it encompasses a wide variety of language use situations (Farris et al., 2008; Mede et al., 2019). These include both the aviation phraseology and plain language (Aiguo, 2008). Such variation in the way pilots and ATCOs communicate with each other implies two things:

On the one hand, it means the correct and standard use of terminologies or phraseologies in air/ground communication, aircraft manufacturing and its specification, even legal terms in aviation law; on the other hand, it refers to the general use of the English language among aviation staff in daily communication, regardless of its nationality, race, and different cultural backgrounds. (Aiguo, 2008, p. 154)

That's why both a standardized way of communication in aviation and nonstandard use of it in daily communication are crucial in that it is used by speakers with various linguistic backgrounds. Being the medium of

communication both in the air and on the ground, AE embraces both native English-speaking pilots and ATCOs, and their non-native English-speaking counterparts. It has been reported that the number of native speakers of AE is below 30% when compared to the non-native speakers (Eißfeldt, 2006). In this sense, AE fits into Mauranen's (2018) definition of lingua franca referring to "a contact language, that is, a vehicular language between speakers who do not share a first language" (p. 7). In the context of aviation, pilots and ATCOs use this vehicular language for radiotelephony communication. In other words, it is a "codified, abbreviated, jargon-filled" (Trippe & Baese-Berk, 2019, p. 30) language with both native and non-native English-speaking pilots and ATCOs. Therefore, it is regarded as the lingua franca of aviation (Estival et al., 2016; Kim & Elder, 2009). However, communication over radiotelephony between these native and non-native speakers for the purpose of attaining simplified, short, condensed, and clear-cut exchanges brings forth the above-mentioned communication breakdowns. The underlying reasons for them can be summarized as follows. First, the need for pilots with effective communication skills has never become more evident than today mainly on account of the dramatic increase in the number of fatal air accidents (such as the Tenerife Disaster) in which communication breakdowns were identified as contributory factors (Etem & Patten, 1998; Jones, 2003). That is why any contribution to reduce such risks is now of utmost importance.

Second, "the latest wave of globalization has meant an enormous growth in the volume and kinds of mobility – and thereby in language contact" (Mauranen, 2018, p. 7). Also, the demand on more pilots and ATCOs and the expansion of flight destinations created more and more job opportunities for people with different linguistic and cultural backgrounds. This paved the way for more frequent cases where native English-speaking pilots and ATCOs communicate with their non-native English-speaking counterparts. Hence, it has turned out to be a big challenge for native English-speaking pilots to communicate over radiotelephony with non-native English-speaking ATCOs over European airspace (Federal Aviation Administration [FAA], 2009). Similarly, non-native English-speaking pilots flying in U.S. airspace reported having difficulty in understanding the instructions especially in crowded airspaces and airports where timely exchanges of messages on the radio are vital for safety and sustainability of air traffic operations (FAA, 2009). Therefore, AE courses provide an invaluable role in serving for the needs of aviation industry to overcome the possible communication breakdowns between speakers of Aviation English.

ESP Teaching

English for Specific Purposes (ESP) is a sub-branch of English as a second language (ESL) or English as a foreign language (EFL), referring to the teaching of English to a group of learners whose aim is to be a proficient user of the target language in the target situation. For this reason, ESP should be regarded as an umbrella term which houses various language teaching/learning settings under it. These settings include English language

teaching for professionals in business, tourism, medicine, science, law, technology, and of course aviation (Celce-Murcia, 2001). In addition, ESP students are mostly motivated by professional needs and thus, the purpose of ESP teaching is to assist ESP students towards meeting such needs (Anthony, 2015; Hutchinson & Waters, 1987). For this reason, ESP course content is totally different from that of general education (GE) and these courses are structured around the professional needs of students in a targeted context rather than a conventional teaching of GE which cover various topics to attain the desired outcomes.

Furthermore, as a specific area of instruction, ESP differs from GE in its focus on four language skills. While GE concentrates on all of them equally: reading, writing, listening, and speaking, ESP focuses on what this “new form of learner who had their own specific reasons and motives for learning English” (Kırkgöz & Dikilitaş, 2019, p. 2) needs. On the other hand, needs of a specific group of students in the target situation are the starting point for ESP course designers (Hutchinson & Waters, 1987). In this regard, AE requires proficiency beyond the mere use of a standard phraseology as the latter is not applicable to abnormal flight conditions when non-native English-speaking pilots and ATCOs are overloaded to overcome the linguistic barriers. Such cases require rich vocabulary and no tremor for intelligibility which cannot be instructed in any course book; and no reflections of mother-tongue in pronunciation of English words for clarity which can only be ensured by the speakers themselves. Therefore, it can be concluded that ESP appears to be a distinct area of teaching which requires expertise of its practitioners. However, the existing literature only focuses on either ESP students (Basturkmen, 2010; Herasymenko et al., 2019; Kırkgöz & Dikilitaş, 2019; Mede et al., 2019; Sullivan & Girginer, 2002; Tajima, 2004) or some linguistic features of AE such as rhythm and intonation (Aiguo, 2007; Trippe & Baese-Berk, 2019). As for EFL/ESL teachers, there are numerous studies focusing on their practices and challenges (Demir, 2017; Gozpinar, 2019; Karabuga & Ilin, 2019; Sali & Kecik, 2018; Tosuncuoglu, 2019; Yazan, 2016). Conceptually, these studies have reported on ESP teachers’ roles (Bracaj, 2014), challenges (Ahmed, 2014; Saliu, 2013), beliefs, attitudes, and instructional practices (Rajabi et al., 2011; Savas, 2009), and ESP teacher cognition (Górska-Poręcka, 2013). Despite the seminal contributions made by several researchers, we still suffer from the scarcity of sound research on ESP AE teachers’ experiences.

The present study is conducted to address this previously unaccounted phenomenon and in response to the need to explore the practices and experiences of AE teachers. This research has great potential to contribute to the literature in many ways. First, designing an effective AE course is closely related to developing a good understanding of ESP AE teachers’ experiences as it may offer insights into the areas to be further developed. Second, exploring their world is invaluable as solutions can be provided to increase their degree of self-efficacy which can, in turn, influence the endeavor they put on their profession, their aims, and level of ambition (Borg, 2001). Finally,

“the construction of the subject’s experience and action” (Rodwell, 1998, p. 19) by means of semi-structured interviews is believed to build on the constructivist approach adopted in this paper. With its contextual particularity, the present study is a special case which has not been given voice to yet, and it should be regarded as “an intensive study of a single unit,” AE teachers, for the purpose of “understanding a larger class of similar units” (Gerring, 2006, p. 37), ESP teachers. In this regard, following research question is addressed:

Are there any instructional challenges encountered by Aviation English teachers? If yes,

- a. What are those multi-pronged challenges?
- b. What are the underlying reasons?

Material and Methods

The present exploratory case study sought to identify instructional challenges ESP AE teachers encountered. Building upon the constructivist research paradigm suggesting that human beings construct knowledge and form meaning based on their experiences, the researcher adopted the case study, which is “a descriptive research document based on a real-life situation, problem, or incident” (Merseeth, 1990, p. 54). Although this research methodology was limited in its scope and it cannot be overly generalized, it can still provide important insights into ESP AE English teachers’ in-class experiences (Baxter & Jack, 2008). In this regard, AE teachers are believed to be invaluable source of information and their accounts of ESP AE teaching practices are expected to best serve for the purpose of the researcher.

Setting and Participants

The setting in which the study was carried out was a higher-education institution in Turkey with a specific focus on aviation. Being the only aviation academy in Turkey, the institution offers four undergraduate programs for prospective pilots: aviation and aerospace engineering, electronics engineering, industrial engineering, and computer engineering. All academic programs start with a preparatory academic year designed to provide intensive ESL/EFL courses and it lasts two semesters. Upon the successful completion of the preparatory year with an English language proficiency of B1 level based on Common European Framework of Reference for Languages (CEFR), ESP students start their undergraduate program lasting eight semesters. During the 1st, 2nd, 3rd, and 4th semesters, only EFL/ESL courses are offered. However, must-have AE courses are offered three hours per week in the 5th, 6th, 7th, and 8th semesters and each lesson lasts 45 minutes. Therefore, each student receives approximately 170 hours of AE instruction upon graduation. Aviation English curriculum covers a range of aviation-related topics to develop proficiency in two language skills: speaking and listening. These include aviation phraseology, radiotelephony communication, meteorological aerodrome reports (METAR), aviation safety, and aeronautical information.

The participants in this study were selected based on voluntary response sampling method. The researcher sent an e-mail to all ESP AE

teachers in the target institution requesting volunteers for the study and five ESP AE teachers (two male and three female) responded to the researcher's e-mail and volunteered to take part in the study. Their ages ranged between 25 to 30 ($M = 27.4$). In terms of participants' previous teaching experience, P1 had 5 years of ESL/EFL teaching experience, P2, P3, and P4 had 3 years of ESL/EFL teaching experience, and P5 had 1.5 years of ESL/EFL and 2 years of ESP (for flight attendants) teaching experience. Also, all of the participants had a MA degree in English Language Teaching. However, none of them had previous ESP AE teaching experience. At the time data for the present study was collected, the participants they had given the AE course for a complete spring semester from October 2019 until February 2020 and it was for the first time in their teaching career. Therefore, the researcher was able to collect a reliable source of information as the participants had very recent hands-on experience regarding ESP AE teaching. Taking everything into account, participants in the present study set a unique sampling in the sense that there is no account of teaching experiences of ESP AE teachers who recently shifted from EFL/ESL teaching. Therefore, their unique portrayals of ESP AE teaching can offer invaluable information for ESP teacher educators, pre- and in-service ESP teachers around the world.

Data Collection and Analysis

The data was collected by utilizing structured classroom observations and semi-structured interviews (Table 1). Five out of seven ESP teachers in the institution consented to participate in this study. First, each teacher was observed for a 45-minute period while they were having face-to-face AE lessons with prospective pilots. Although voluntary teachers were informed about the upcoming observation, they were not specifically told that researcher intended to analyze their classroom practices so that their teaching practices were not influenced in any way by the purpose of the researcher. All five observations were audio-recorded and conducted on the same week to ensure that all participants were teaching the same content. This provided a more reliable snapshot of the teaching practice and helped the researcher to develop a better understanding of the teaching setting.

The observed AE course sessions covered the topic of parts of aircrafts. Each observation included a checklist based on Sheltered Instruction Observation Protocol (SIOP) (Echevarria & Short, 2014). The checklist included 8 components, namely Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice/Application, Lesson Delivery, and Review/Assessment. The purpose of using sheltered instruction is to teach "content to English language learners in strategic ways that make the subject matter concepts comprehensible while promoting the students' English language development" (Echevarria & Short, 2014, p. 2).

Second, semi-structured interviews had to be held online via Microsoft Teams as face-to-face teaching was suspended due to Covid-19 outbreak. The Interview Protocol included eleven questions under three parts. First part of the interview aimed at getting to know participants' pedagogical and

professional background and the context they practice; the second part focused on teachers' experiences in their ESP teaching environments; the third part was about their reflections on self and others. In terms of the interview format, a "pre-prepared, elaborate interview schedule/guide" (Dörnyei, 2007, p. 135) was followed. This format included a specific list of questions to be addressed to each interviewee so that the answers could be compared across different interviewees.

As for data analysis, the researcher first reviewed observational notes and checklists immediately following the observations. This was followed by the iterative listening of total 163 minutes-long recorded sessions to build upon the initial analysis so that a detailed description of what happened in the classroom could be made. Also, interview data was analyzed through qualitative content analysis method which is based on the identification of thematic patterns in a data set (Neuendorf & Kumar, 2015). To do so, the researcher transcribed a total of 65-minutes-long interview data and then the responses were iteratively coded by instrumenting open, axial, and selective coding techniques (Boeije, 2010; Flick, 2009), which helped the researcher in identifying and grouping the commonalities in responses and then in seeking thematic patterns among the emerging codes. In the end, the researcher categorized the codes in four different themes which were in accordance with the study's focus. The findings of the study were presented under separate titles and participants were referred to as 'Instructor 1,' 'Instructor 2,' 'Instructor 3,' 'Instructor 4,' and 'Instructor 5' to comply with ethical and confidentiality issues.

Table 1

The Instruments, Procedure, and Purpose for Utilization

Instrument	Procedure	Purpose
Structured Classroom Observation (eight SIOP components)	Took place with each participant for a 45-minute period.	To observe ESP AE teachers in-class practices regarding ESP teaching and to get an initial understanding of ESP
Semi-structured interviews (eleven questions)	Took place online with each participant after all of the classroom observations are completed.	To obtain more specific accounts of ESP teachers' experiences

Findings

The present study was conceptualized on the constructivist research paradigm and conclusions were constructed based on the analysis of qualitative data (Table 2). In terms of instructional challenges, qualitative data mainly reflected aspects of perceived *self-efficacy* beliefs, relating to producing appropriate behaviors to what are encountered in real life

(Zimmermann, 1990). It was also found out that *low contextual knowledge* was also a prominent challenge for ESP AE teachers. As for the underlying reasons for these challenges, *lack of professional development programs* and *inexperience in ESP teaching* were identified.

Table 2
Emerging Themes

Diagnosis	Themes	Codes
Challenges	Low self-efficacy	Feeling uneasy in the classroom Self-study before the lecture to be more familiar with the content Need to work hard to help students attain the outcomes Should feel more comfortable and confident to do the job Colleagues do not see themselves as a respectable figure Too much expectation from instructors
	Low contextual knowledge	Unfamiliarity with aviation terminology Having more knowledgeable students than the instructor Need qualified mentors to consult on the content More proficient students
Underlying Reasons	Lack of professional development programs	Need to learn how to use ESP-specific materials No opportunity to for observation in ESP teaching settings Need to be a more knowledgeable teacher in aviation Search for an appropriate instructional methodology
	Inexperience in ESP teaching	No previous ESP teaching experience No training on teaching Aviation English Totally different experience Hard shift from ELT to ESP

Low Self-efficacy

Self-efficacy is defined as “people’s judgement of their capabilities to organize and execute courses of action required to attain designated types of

performances” (Bandura & Schunk, 1981, p. 31). The findings of this study revealed that low self-efficacy is a prominent challenge for ESP AE teachers. During the structured classroom observations, participants were observed to have difficulty in building background while teaching parts of an airplane. It included the difficulty in explicitly linking new concepts and past learning. This mostly resulted in several instances when they needed to check their own knowledge regarding the control surfaces of aircrafts, which were in close relationship with parts of an aircraft.

Similarly, participants reported during the interviews that shifting from EFL/ESL to the goal-oriented ESP AE teaching was a real challenge for them. According to Instructor 1, AE was “a different topic” for her and she perceived low self-efficacy as the reason for encountering challenges in the classroom. Therefore, she reported that she was not “competent enough with the terminology and the goals of it and the aims of it.” Along similar lines, Instructor 3 highlighted that she had difficulty in adopting herself to a goal-oriented AE course and that she “needed to feel confident enough to teach.”

ESP AE teachers reported another issue regarding perceived low self-efficacy. Some of them had more proficient students than them in terms of content knowledge. In this regard, when participants were asked to identify the points that they needed to improve in terms of their teaching practices, Instructor 2 highlighted the issue of teaching AE to a more proficient group of learners and stated that his instructional challenge resulted from the lack of content knowledge and expertise in aviation. Although he was already familiar with aviation to some extent, he still suffered from a relatively smaller gap between him and more knowledgeable learners. What’s more, Instructor 5 appeared to be well aware of the fact that having some background knowledge or previous teaching experience clearly made him feel more secure yet not enough to call him a self-efficient teacher. He further stated that his previous ESP teaching experience with prospective flight attendants was the reason for being “accustomed to goal-oriented ESP teaching.” Although Instructor 5 displayed a comparatively higher level of self-efficacy thanks to his previous ESP teaching experience, Instructor 3 lacked that experience and thus she felt “insecure” in the classroom. Therefore, she stated that she needed “to get more familiar with the content” as it made her “feel more confident and competent” to practice her profession. The only exception was Instructor 2 who did not report any need to develop his teaching practices.

Last but not least, the representation of ESP AE teachers’ perceived low self-efficacy was present in the way they interpreted their role as ESP teachers. For instance, they did not regard themselves as the more knowledgeable other regarding the content knowledge on Aviation English. While those who had no background knowledge on aviation or previous ESP teaching experience identified their role in the classroom as “a guide.....not competent enough with the terminology” (Instructor 1), the others with some familiarity with aviation phraseology had clear-cut portrayals of their role.

The latter also seemed to be more aware of what they were doing in the classroom. For instance, Instructor 5 stated:

My role is to lead my students throughout the learning process. I need to make use of everything we have to make the content as meaningful as possible for them. I know that they rely on me in terms of getting to know everything about Aviation English.

However, perceived low self-efficacy belief of Instructor 3 resulted in depicting herself as an ESP teacher with a considerably minor role as she stated that she was “just teaching the language” and that she was “not expert in the field or the technical issues... just try to focus on the language aspects while teaching.” ESP AE teachers’ understanding of their role in the classroom was therefore shaped by their own judgment of their capabilities to help their students attain the desired outcomes of AE courses.

Low Contextual Knowledge

ESP AE teachers’ lack of content knowledge on aviation was a big challenge for them. Instructor 3, for instance, stated that aviation terminology, topics, and target structures were too specific and she was both curious and suspicious about her teaching practices. She further commented that “.... at one point, I thought I couldn’t do this job because it was too detailed” (Instructor 3). This showed that she could not rely on her contextual knowledge to perform her profession. Similarly, Instructor 1 highlighted that aviation was a totally unfamiliar topic and a new context for her and that she was “not competent enough with the terminology and the goals of Aviation English course.” Besides, Instructor 4 touched upon the consequences of low contextual knowledge and stated that ESP was a totally different discipline requiring direct focus on the content hence it was quite challenging for her to give the content in a communicative way. This issue was given voice to in another instance by Instructor 5 who reported that his colleagues did not see themselves as a respectable figure in the classroom as they lacked contextual knowledge.

During the course of observations, ESP AE teachers were observed to have difficulty in lesson delivery due to lack of contextual knowledge. This included, for instance, engaging students in tasks and activities. Instructor 1, who had previously mentioned that she was not competent enough with the terminology, was observed encountering challenges in delivering the target content about parts of aircrafts. The observed lesson was mostly comprised of lecture with a very limited time allocated for in-class activities for students to have active part in meaningful conversations on the target subject. Also, Instructor 4, who had previously reported having trouble integrating the content knowledge into her teaching practice, was observed having difficulty in providing activities for ESP AE “students to apply content and language knowledge in the classroom.” In light of these findings, it can be concluded that low contextual knowledge played a contributory role for ESP AE teachers’ instructional challenges.

Lack of Professional Development Programs

Lack of professional development programs (PDP) appeared to be a significant reason for encountering instructional challenges. Although two out of five ESP AE teachers previously attended a PDP, the others did not. Also, two out of three instructors in the latter group reported familiarity with aviation or at least some background knowledge on aviation terminology, yet the last one in the same group did not report anything in terms of familiarity with aviation or attendance in any PDP. All instructors did agree that they needed a PDP on teaching AE to pilots. Instructor 2, for instance, said: “I do feel the need for such a program, also instructional methodologies as well. So, it can help me overcome the instructional methodology.” Instructor 3 also commented “Of course, I need. I mean, we need practical solutions rather than theoretical aspects because we already know it. So, while teaching it can be useful and handy for us to learn more practical tips or techniques.” In another instance Instructor 5 built upon his experiences during his undergraduate studies in relation to the demand on PDPs and commented “...during my bachelor’s degree at Bogazici University, I used to see all kinds of different content being taught in English... the things I label as instructional challenges seem to be only the choices I make deliberately. Therefore, if I attend any, they would help me justify my approach or correct it.” No matter how different their standpoints were in terms of the ways PDPs could contribute to them, they all acknowledged the need for a PDP.

However, when the responses of two participants who had previously attended a PDP were analyzed, it was found that degree of satisfaction with the PDPs was open to discussion. While Instructor 1 commented “It helped me to overcome some of my instructional challenges. Before I attended the course, I had no idea about aviation before,” Instructor 4 stated “No, it didn’t help me... I wanted to see an example, for example, not a whole program, but just, you know, just a workshop.”

Inexperience in ESP Teaching

The last emerging theme regarding the underlying reasons for the instructional challenges of ESP AE teachers was *inexperience in ESP teaching*. When participants were asked to describe how their colleagues see them as an ESP AE teacher, the responses were shaped by teachers’ reflections on inexperience. Instructor 1, who had no previous ESP AE teaching experience, said “My colleagues think I’m okay.” Similarly, Instructor 3 believed that her colleagues see her as a counselee because she always consults to them. On the other hand, Instructor 5 had four years of ESP teaching experience with flight attendants and he stated that his colleagues described him as “a respectable figure and sometimes a guide.”

From a different point of view, when ESP AE teachers were asked to describe the Aviation English courses in relation to how they plan them, inexperience manifested itself as follows: “Actually, we’re also new in this thing and we don’t have any experience. We are just trying to plan the curriculum” (Instructor 1). Her inexperience in ESP teaching appeared to

impede her to describe the way she planned her lessons; rather she simply “used some good books” (Instructor 1). This link between inexperience and curricular concerns was also mentioned by Instructor 2 commenting: “I make some adaptations based on my student's language proficiency level. Just directly ask students, what they think about the material...We need like a conclusive needs analysis and we should have clearly defined goals.”

Discussion and Conclusion

This paper focused on an ESP AE teaching setting and its key strength lies within the fact that long-neglected experiences of ESP AE teachers were analyzed for the first time in Turkish setting and suggestions were provided to improve their experiences. In this regard, low self-efficacy and low contextual knowledge were identified as the most significant challenges of ESP AE teachers, and lack of professional development programs and inexperience in ESP AE teaching were found to be the underlying reasons for these challenges. However, it should be noted hereby that present study was exploratory in nature with a relatively small sample of ESP AE teachers. Therefore, findings reported here should be carefully interpreted for similar settings.

Self-efficacy is a delicate issue to be handled with care. As Bandura (1982) stated, the term refers to “how well one can execute courses of action required to deal with prospective situations” (p. 122). Given that participants in the present study had little or no experience in ESP AE teaching, they suffered a lot from low self-efficacy in several different instances. The existing literature provides no account of the effect of self-efficacy on ESP AE teachers. However, teachers in this study had just shifted from ESL/EFL to ESP AE teaching and findings regarding their self-efficacy beliefs were in line with studies on EFL teachers. For instance, Liu (2007) concluded that EFL teachers cannot regard themselves as capable of achieving a high level of linguistic proficiency. Similarly, it is conceivable in the light of reported studies (Chacon, 2005; Knoblauch & Hoy, 2008; Tschannen-Moran & Hoy, 2001) that self-efficacy was a significant challenge for EFL teachers. Sali and Kecik (2018) also mentioned the same issue with EFL teachers in Turkey and suggested providing teachers with affective scaffolding to help them in the development of higher self-efficacy. However, findings of the present study should not be interpreted as prognosis to EFL settings, which was not the concern of this paper; rather, they should be carefully analyzed because this paper shed light on the long-neglected ESP AE teaching setting in Turkey despite the fact that there is a significant increase in the availability of ESP AE courses. Therefore, it is hereby suggested that professional development programs can be helpful for ESP AE teachers in guiding them on this goal-directed ESP teaching setting and thus, they can improve their perceived self-efficacy and the quality of their teaching practices.

This paper has made a substantial contribution to ESP research. In a recent attempt, Baleghizadeh and Shakouri (2017) had identified the link

between teaching style and self-efficacy in Iranian ESP setting and concluded that teaching style is influenced to a great extent by the sense of self-efficacy. In support of such findings, it was hereby concluded that teaching practices of ESP AE teachers also varied a lot in Turkish ESP setting and this might well affect the quality of instruction and in turn, the academic achievement of AE students. Along similar lines, Kırkgöz (2019) had previously concluded that pre-service ESP teachers were well aware of their needs to be more knowledgeable on the context they would teach and that there was constant need to refresh their knowledge. Consistent with Kırkgöz's (2019) findings, the present study concluded that ESP AE teachers suffered greatly from inexperience in ESP AE teaching and they presented a clear image of the need to develop themselves more on the target context. However, it should be noted that one of the restrictions of this study was the shift of teachers from ESL/EFL to ESP teaching. While pre-service teachers in Kırkgöz's (2019) study had the opportunity to compensate for their low contextual knowledge throughout their higher-education programs, it was not that easy for in-service EFL/ESL teachers in the present study. Therefore, the second suggestion of this paper is the integration of content knowledge on the particularities of ESP teaching into ELT teacher education programs.

Lampert (2010) defined teaching as “a learning profession” (p. 21). Therefore, it involves a continuous growth. When teachers are surrounded by feeling of self-inefficacy, they are very likely to encounter instructional challenges in the classroom. These issues were prominent in the present study as AE teachers well appreciated their self-efficient colleagues with prior experience. When inexperience was coupled with low contextual knowledge, AE teachers displayed a very low degree of perceived self-efficacy. Desimone (2009) proposed that teachers' experiences in professional development programs result in changes in their instructional skills, attitudes, and self-beliefs and these changes are likely to affect their instructional practices giving rise to greater student learning. However, the ESP AE teaching setting in Turkey and specifically the target institution in this study lacked novice ESP AE teachers for two reasons: First, many novice teachers had been dismissed after the coup attempt in 2016. Second, the rapid increase in the interest and availability of AE courses in Turkey over the last decade required more ESP AE teachers, which was not an easy demand to meet in such a short time. Therefore, many institutions relied on ESL/EFL teachers shifting to ESP teaching without the knowledge on aviation or particularities of ESP AE teaching. In this regard, although findings of the present study are limited to a specific institution offering AE courses, they provided implications beyond it. For instance, professional development programs were given voice to in several other studies (Chen & Goh, 2011; Karabuga & Ilin, 2019; Noughabi, 2017; Yazan, 2016) for improved teaching practices and thus, it is hereby suggested that professional development programs may also contribute a lot to inexperienced ESP AE teachers in becoming self-efficient teachers.

To conclude, note that the present study provided important insights into ESP AE teachers' experiences, which had not been highlighted before. The findings of this study also had important implications for ESP researchers as the emerging issues set the ground for future research. Finally, having given the key aspects of this study above, longitudinal research is believed to be helpful in providing a better understanding of ESP AE teachers.

Limitations

Although the participants had very recent ESP AE teaching experience at the time this study was conducted, their experience was relatively limited as they offered this course for the first time in their professional career. Therefore, their accounts of ESP AE teaching might not fully resemble to their more experienced counterparts' portrayals.

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