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Developing a Competency Model for EAP Teachers: Insights from Internationalization of Higher Education

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Abstract

Internationalization has changed higher education in recent decades. Given the important role of teachers in the process of internationalization of higher education (IHE) and the close relationship between teachers' competencies and the extent of IHE in a university, and since few studies have been conducted on EAP teachers professional development and their competencies, the purpose of this study was to develop a competency model addressing the needs of Iranian EAP teachers to effectively engage in the education fitting the IHE objectives and policies. To this end, a questionnaire measuring EAP teachers' competencies was designed and piloted. In the validation phase, it was administered to 74 EAP teachers from both camps (language and content). The data obtained confirmed a suitable psychometric structure for the 23-item EAP teachers' competencies questionnaire (EAP TCQ), which was made up of six components of Disciplinary knowledge, Academic literacies, Critical English for academic purposes (CEAP), Pedagogical skills, Disciplinary identity, and Technology competence. Furthermore, the results of confirmatory factor analysis for the components of academic literacies as an underexplored construct and identity and technology competence as new constructs in EAP teaching revealed that the questionnaire is valid and reliable enough to be used for evaluating EAP teachers' competencies. As far as implications are concerned, EAP TCQ can be highly insightful and practical for EAP teachers and EAP teacher educators to reflect upon, explore, and develop the addressed competencies.

Keywords: Competency, English for academic purposes (EAP), EAP teachers, Internationalization of higher education (IHE)

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INTRODUCTION

Internationalization of higher education (hereafter IHE) is an inevitable process for universities. IHE is not a new concept as it emerged in the 1970s and has become a catchword since its expansion in the 1980s; nonetheless, the core idea of this term is conceptually elusive (Knight, 1994; Knight & de Wit, 1995) and is used with very different definitions (Knight, 2015). The widely accepted definition of IHE is "the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education" (Knight, 2015, p. 2). Knight (1994) attempted to focus on a clear definition of IHE and clarified four approaches, i.e., process, activity, competency, and organizational. Among the four approaches, the competency approach views internationalization as a process of developing new skills, attitudes, knowledge in students, faculty, and staff (Knight, 1994). It entails specific sets of opportunities and challenges in each academic setting, as it requires different levels of transformation (Altbach, Reisberg, & Rumbley, 2009). This transformation in the faculty members (Coryell, Durodoye, Wright, Pate & Nguyen, 2012; Teekens, 2003; van der Werf, 2012) must happen in "the organization of research, training, and administration in higher education" (Cohen, 1997; as cited in Bartell, 2003, p. 48).

From another perspective, the increasing number of international students taking courses in English, at tertiary levels, had a noticeable effect on the status of English (Huo, 2020; Hyland, 2006; Kuteeva, 2011). While English is enjoying its international status as a "global language" (Crystal, 1997), a "lingua franca" (Sifakis & Tsantila, 2019), or a commodity in the process of IHE (Block, 2008; Ding & Bruce, 2017), the global demand for English language courses is calling for qualified English language teachers (Huo, 2020). The English education which is designed to improve the university students' language proficiency, and meet the needs of the higher education institutions is considered as English for Academic Purposes (EAP) (Gunning, 2009). Therefore, currently, the main concern of IHE is

the development of capabilities and competencies of the academic forces (de Wit & Knight, 1999; Huo, 2020).

In view of the above lines, the burgeoning process of IHE coupled with EAP development offered the right moment to nudge EAP forward in the center of the arena (Ding & Bruce, 2017). English for Academic Purposes is "the study of English for the purpose of participating in higher education" (Bruce, 2011, p. 6). EAP provides sophisticated accounts of the academic discourse by translating the discursive practice into pedagogically valid forms (Charles, 2013), appropriate academic conventions and disciplinary culture (Jordan, 1997), specific language, skills, and genres (Johns, 2013). By paying particular attention to studying, doing research, and teaching in the English language (Flowerdew & Peacock, 2001; Jordan 1997), EAP meets the versatile needs of learners from diverse nationalities and language backgrounds who are seeking to undertake higher education, research, or teaching in English-medium contexts (Ding & Bruce, 2017).

EAP teachers play a crucial role in achieving the objectives of IHE. EAP teachers (content experts or language teachers) address the international requirements of their field of study and the specialized discourse-related competencies (Basturkmen, 2019; Hyland & Hamp-Lyons, 2002) and, therefore, prepare the advanced learners of English to function efficiently at local and global levels (Evans & Green, 2007). Thus, the internationalization of the teaching body is one of the main practical measures in the realization of IHE (Altbach & Knight, 2007; Finkelstein, Walker, & Chen, 2013). Also, an important aspect of internationalization is strengthening the capabilities and competencies of the teachers (de Wit & Knight, 1999). Nonetheless, many EAP teachers have problems with meeting the expectations of IHE and need quality teacher education in teaching culturally, linguistically, and ethnically diverse students (Clifford, 2010; Gopal, 2011; Huo, 2020).

Given the above-mentioned explanations, investigating teachers' needs and competencies involving in this process is an underexplored domain not only in higher education institutions (Gacel-Ávila, 2020; Teekens, 2003;

van der Werf, 2012) but also in the literature and empirical studies (Basturkmen, 2014; Lemke, 2012; Richards, 1997; Todd, 2003). Despite the extensive debates in both areas of IHE and EAP (e.g. Allison & Tauroza, 1995: Basturkmen, 2014: Blaj-Ward, 2014: Bruce, 2011: Flowerdew & Peacock, 2001; Hall, 2013; Hyland, 2019; Hyland & Hamp-Lyons, 2002; Hyland & Shaw, 2016; Li, 2020), teachers who practice EAP in such settings, have not received adequate attention (Atai, 2002; Basturkmen, 2010; Belcher, 2013; Blaj-Ward, 2014; Ding & Bruce, 2017; Ding & Campion, 2016) and this is due to a wrong general opinion that all teachers, by nature, are capable of discussing the needed topics, standing before a culturally mixed group, and teaching in an international language, such as English (Teekens, 2003). More tragically, those few kinds of researches that contribute to EAP teacher development are all conducted in the one context and have a UK orientation (e.g. Alexander, 2012, 2013; Campion, 2016; Martin, 2014; Post, 2010). In addition, the dearth of literature on EAP professional development (Blaj-Ward, 2014, Hamp-Lyon, 2011; Richards, 1997; Todd, 2003) has brought about the marginal interest of the researchers in this area of study (Basturkmen, 2010, 2014; Belcher, 2013). Furthermore, different components of the EAP teachers' knowledge-base have been defined and labeled differently in the literature (BALEAP, 2008, 2014; Basturkmen, 2010; Bruce, 2011; Charles, 2013; Ding & Bruce, 2017; Hyland & Shaw, 2016; Jarvis, 1983) and there is still no consensus on the required competencies of EAP teachers.

As regards IHE, the available measures concerning teachers' competencies are only concerned with the demographical information of the teachers' past academic experience (Teekens, 2003). Taking the aforementioned discussion into account, this study intended to investigate the requirements of EAP teachers from the perspective of IHE and define exactly what competencies, abilities, knowledge, and skills an EAP teacher teaching at internationalization scale needs to possess.

LITERATURE REVIEW

In what follows, a brief overview of the literature, in both internationalization of higher education (IHE) and English for academic purposes (EAP), discussing the needed competencies, skills, and knowledge of teachers in this setting are presented.

Research on Teachers in IHE

One of the most comprehensive contributions to this topic is Teekens's (2001, 2003) profile of 'the ideal lecturer' in IHE. Teekens (2003) proposed nine qualifications for teachers in an international context that require them to be qualified in terms of using a non-native language, media, and technology, various teaching styles; in addition, they need to know how to treat with different learning styles and personal qualities of students. Teekens (2001) also stressed, "The demanding role of standing before a culturally mixed group and teaching in a language other than their own" (Teekens, 2001, p. 23). Moreover, teachers in an international context have to have knowledge related to the international job market, education system, and academic discipline. More specifically, for the first time in the IHE studies, competencies needed for the use of English as the language of instruction have been addressed (van der Werf, 2012). Teekens' (2003) qualifications are significant from two points of view; first, they defined the building blocks of a foundation on which the authorities can plan further education programs and put these qualifications, requirements, and knowledge into practice; next, they provided valuable insights into the demanding role of teaching in the landscape of IHE (Arabkheradmand, Shabani, Zand-Moghadam, Samadi Bahrami, Derakhshesh & Rahimi Golkhandan, 2015) and this can highlight the need of the existence of education programs in this area. However, Teekens' (2003) delineations of the needed specific competencies, skills, and knowledge are not discussed in the cluster of qualifications. Additionally, her suggestion of competencies for teaching tasks was insensitive to the circumstances of different contexts

and the specific competencies that teachers are expected to have in various phases of their teaching career (van der Werf, 2012).

van der Werf (2012) asserted that teachers' capabilities in the IHE setting are not confined to teaching internationally or interculturally diverse groups of students and specific competencies are needed to meet the requirements of IHE. To compensate for the drawback of Teeken's (2003) suggestion, she developed an 'International Competences Matrix' in which a set of eight competencies are defined against a set of fourteen tasks that teachers have to normally undertake in the IHE context. Although she attempted to diversify the competencies, the competencies defined in the matrix were based on the Teekens' (2003) qualifications' definitions, and in the same vein, the main competency has been recognized as proficiency in the English language.

van der Werf's (2012) matrix of competencies includes English language proficiency understanding (listening and reading), speaking (interaction and production), writing as the first three ones, research competences and intercultural in an international context as the fourth and fifth ones; the last three areas are connected with the education system and different teaching and learning styles, the personal academic discipline in an international context, and the international labor market of the professional field. The teachers are expected to fulfill a set of tasks for the multinational and multicultural working environment of IHE. She categorized the three tasks of teaching in national or English language, counseling, and curriculum development into two groups for domestic and international students; concerning the students, two tasks of supervising international projects and international study periods of international students are also included. Regarding the teachers' personal academic life and scholarship, she recognized six tasks of participating in international conferences and meetings, maintaining international relationships with partner institutions, and teaching abroad in English, doing research in national and international contexts, and then publishing it in English.

Paige (2009) stressed the role of intercultural competence for teachers who are going to offer internationalized experiences to their students. Deardorff (2009) defines intercultural competence as the capacity to exploit one's intercultural perspectives, interpretations, and knowledge to communicate appropriately in culturally diverse environments. Paige's (2006) definition of the ability to examine knowledge from a cross-cultural perspective can also denote intercultural competence. Teachers displaying intercultural competence is an indispensable part of IHE (CBIE, 2014; Thondhlana, Garwe, & Hans de Wit, 2020). The need of educating teachers who are aware of the latest global issues and develop intercultural competence in IHE (Green, 2005). These teachers act as "primary facilitators" (Johnson, 2003, p. 22) to enable learners to respond appropriately to the calls of internationalization and prepare them to succeed in the face of international academic challenges (Huo, 2020).

Given that currently, there is no education program discussing teachers' required capabilities at IHE scale (Sakurai, 2019), this review brings up the need to study the most neglected section of IHE, teachers' needs, and preparing teachers for IHE (Gacel-Ávila, 2020; Paseka, 2000; Thondhlana et al., 2020).

Research on EAP Teachers

Viewing the development of the body of EAP research before and after the 21st century indicates the piecemeal fashion from no attention to little attention on the practitioner and practitioner-related issues (Ding & Campion, 2016). Therefore, the growing popularity of EAP classes as the specific learning context in higher education academic setting (Hyland & Hamp-Lyons, 2002) and English as an international language (Flowerdew & Peacock, 2001) developed the need to explore the necessary skills, knowledge, and capabilities, and provide the EAP teachers and scholars with recent international advances (Welikala, 2011). As EAP was not

considered differently from its parent discipline, ESP, in its early stages, the early practitioners were the experienced ESP teachers who had taught or were teaching abroad (Ding & Bruce, 2017; Jordan, 2002; Hyland 2006). Thus, discussions about specific competencies were redundant as ESP teaching experience and teaching in English in English-speaking countries were the only needed competencies.

Jarvis (1983), Hutchinson and Waters (1987), Jordan (1997), and Robinson (1991) were among the pioneer scholars who discussed the specific needs of ESP/ EAP teachers. Jarvis (1983) proposed a list of teacher competencies, consisting of two core skills of language analysis and language selection as the fundamental abilities to analyze academic language and situations and eleven specific abilities to 1.analyze specific purposes language and situations, 2.evaluate teaching textbooks, 3.evaluate learner attainment, 4.devise performance objectives, 5.design or interpret syllabuses, 6.design or interpret schemes for work, 7.devise teaching and learning strategies, 8.devise individual, yet interrelated teaching sessions, 9.produce materials, 10.organize and teach the designed sessions, and 11.assess achievement of objectives. Flexibility, creativity, resourcefulness, well-developed organizational and managerial skills, interpersonal and cross-cultural communicational skills, mature problem-solving and decision-making skills are stated as the required traits of successful practitioners of EAP (Hutchinson & Waters, 1987; Robinson, 1991). Jordan (1997) stressed the EAP teachers' capabilities to develop study skills particularly reading, and English language proficiency, and assist the learners to learn the academic code to adapt to a new academic system (Jordan, 1997). Early attempts are mostly concerned with some general skills, an attitude of flexibility, and a unique role of "negotiator" to enter "the new realms of knowledge" for the effective practice of EAP (Hutchinson & Waters, 1987, p. 158), although the components of this realm have remained rather unknown. It is noteworthy that at the time of these attempts EAP was deemed as a variant of ESP (Li, 2020).

Recently scholars espoused the essential components of an EAP teacher education program as the knowledge basis and needed skills (Basturkmen, 2010, 2014; Bruce, 2011; Charles, 2013; Ding & Bruce, 2017; Hyland & Shaw, 2016). There are also few studies conducted empirical studies on EAP teacher development and addressed specific competencies in this regard (e.g. Campion, 2016; Martin, 2014). There is also a benchmark for EAP teachers named Competency Framework for Teachers of English for Academic Purposes (CFTEAP) (BALEAP, 2008), and the BALEAP (British Association of Lecturers in English for Academic Purposes) TEAP (Teaching English for Academic Purposes) Accreditation Scheme (BALEAP, 2014). To begin with this document, EAP teachers need knowledge and skills in four areas of competency: academic practice, students' needs, curriculum development, and program implementation. Competency is defined as some technical skills and professional capabilities that can assist teachers to function effectively (Aitken, 1998). By defining the necessary knowledge and skills, BALEAP attempted to establish a theoretical foundation for EAP practice, Units A, B, C, and D, each consisting of some specific areas. Due to its tendency to limit the autonomy and reflection of EAP teachers (Ding & Campion, 2016) and UK-centric ideologies and policies that cannot be a good representative of the competencies required for other EAP practitioners, it has not received due attention in the literature of EAP (Bruce, 2011, Ding & Bruce, 2017). Nonetheless, CFTEAP is "an invaluable resource" (Hamp-Lyons, 2011, p. 100) that can be a navigator for practitioners to oversee their development on the route (Ding & Bruce, 2017).

Martin (2014) investigated the uncertainties that EAP teachers come across on their journey to EAP, in the UK. It was found that the linguist's ability of text analysis, pattern recognition, the knowledge of academic processes, and awareness of the academic qualifications and disciplinary specificity are the main capabilities that can solve the teachers' uncertainties and prepare them on their path of becoming EAP teacher. Later, Campion (2016) studied the transition of EAP teachers from teaching EGP to EAP at the University of Nottingham in the UK again, and found the main challenge of this route as the disciplinary specificity; therefore, "specialised knowledge of the language in academic contexts, with all the added disciplinary variations that this may entail" (Campion, 2016, p. 60) can be the competency that assists teachers to overcome the challenges may appear on the transition.

Basturkmen (2010) also elaborated on the needed competencies and categorized them separately into two groups of knowledge and skills; she proposed three areas of knowledge of teaching, knowledge of language analysis, and knowledge of the specific domain of interest. Additionally, a set of six tasks including instruction in the specialist language, course development, need analysis, investigating specialist discourse, devising pedagogical description of that discourse, and assessment of the specialist language focusing on EAP teaching skills has been addressed. Charles (2013) also states that three approaches are needed to feed the EAP knowledge basis: corpus-based work, genre analysis, and the investigation of the social context. The third approach is significant, compared to the ones repeated in other approaches, as it shed light on the social dimension of EAP concerning the learners' socialization into the discourse community and examining the nature of EAP in an embedded sociocultural context (Benesch, 2001; Charles, 2013; Hyland, 2009; Pennycook, 1997).

Similarly, Bruce (2011) addressed three approaches to probe into the academic world and develop the EAP knowledge basis: researching academic community, disciplinary knowledge, and meta-knowledge of academic subjects. Therefore, in the first place, EAP teachers should expand the capabilities to adopt the discourse practices of the experts (Hyland, 2006) to enter the hierarchical academic community (Lave & Wenger, 1991). Disciplinary knowledge is concerned with discipline-specific features of academic texts and teachers' abilities to use ethnography studies, genrebased and corpus-based analysis. Meta-knowledge of academic subjects is the third area that entails investigating the academic world norms and conventions of different academic communities.

Hyland and Shaw (2016) raised the importance of the main distinguishing features of EAP as they can account for the strong theoretical foundation of EAP. They contended that Authenticity, Groundedness, Interdisciplinary, and Relevance must be considered in the design of EAP teaching programs as each principle addresses a specific knowledge domain needed to be acquired by EAP teachers. Authenticity shows cohesion, coherence, and rhetorical structure in authentic texts as genre models. Groundedness means that EAP pedagogy considers the academic communicative needs, genre, community, and the discourses the students are going to be involved in in the future. The interdisciplinary nature of EAP underscores understanding of the broadly eclectic range of theories and methods including systemic linguistics, discourse analysis, pragmatics, critical theory, social constructionism, communicative language teaching, contrastive rhetoric, socio-cognitive theory, and the sociology of scientific knowledge. Relevance, or linguistic and contextual relevance, indicates the systematical identification of the specific skills, texts, and communicative practices, obtained through need analysis.

Ding and Bruce (2017) specifically indicated that the EAP teachers can also develop their knowledge basis by the ongoing development of knowledge and expertise in three streams of theory and research: classroom practice, community involvement, and scholarship. The knowledge base for the classroom practice can be further divided into two streams of theoretical and analytical knowledge; the theoretical knowledge base is concerned with "theories of cohesion and coherence, genre theory and key elements of systemic functional linguistics" (p. 110). Analytical knowledge is about the methods of inquiry investigating disciplinary subject practices and unraveling the writing of disciplinary texts (Bruce, 2011). The second stream is discourse community which is concerned with participating in the community and using the discursive structures (Ding & Bruce, 2017) that represents the discourse coherence and like-mindedness of the members of particular groups (Hyland, 2006). The third stream, scholarship, is about the development and refinement of "the overall knowledge of the practice in EAP" (p. 111). Scholarship means conducting research and communicating the findings which are "public, susceptible to critical review and evaluation, and accessible for exchange and use by other members of one's scholarly community" (Shulman, 1998, p. 5)

In a parallel line of discussion, Ding & Bruce (2017) argue for the inclusion of the main research streams of EAP which are Systemic Functional Linguistics, Genre-theory, Corpus linguistic, Academic literacy theories (Ac Lits), and Critical EAP (CEAP) (Ding & Bruce, 2017). They asserted that the complexity of understanding the foundation of EAP knowledge-base, and five lines of researches have thus far have created barriers to delineate the EAP teaching competencies. The required capabilities of these lines of researches can function as a sound foundation for EAP teacher education and teaching practice.

Although more than twenty years ago, experts and researchers expound on the required skills, competencies, and attitudes of teachers in this field for the successful practice of EAP (Hutchinson & Waters, 1990; Robinson, 1991), the absence of EAP teacher education programs and inadequate understanding of the needed competency and knowledge-base can account for the shallow understanding of EAP teachers' needs (Atai & Nejadghanbar, 2017; Ding & Campion, 2016; Hamp-Lyons, 2011) leading to the widespread discrepancy about the required capabilities by the EAP teachers (Robinson, 1991). The intellectual, theoretical, and empirical foundations of EAP have been expanded over the past years and the results are ready to inform EAP teaching (Ding & Campion, 2016). Nonetheless subtle observation of the available resources, published journal articles, chapters in books, unpublished M.A. theses and Ph.D. dissertations, and conference presentations on the subjects of EAP teachers and EAP teacher education and development (Ding & Campion, 2016; Hamp-Lyon, 2011, Li, 2020) resulted in a limited number of empirical studies and scholars interested in this topic. The present study, hence, aimed to integrate and expand the available theoretical and empirical foundations of EAP and explore the needs of teachers working in EAP at the IHE scale. To the best of the researchers' knowledge, no study could be found in the literature which addressed the capabilities, competencies, skills, and knowledge of EAP teachers in the environment of IHE.

PURPOSE OF THE STUDY

The main objectives of this study were to 1) describe what competencies, knowledge, and skills an EAP teacher teaching at the internationalization scale needs to possess, in order to propose a detailed competency model of competencies, and 2) develop and validate a questionnaire measuring the EAP teachers' academic literacies and competencies teaching in internationalized higher education, based on the developed model. Therefore, the main research question in the present study was: "What are the components of EAP teachers' competencies based on the framework of the internationalization of higher education?"

METHOD

Participants

Four groups of participants participated in the present study. The participants of the first group were 19 experts and tenured faculty members, including 9 IHE experts (2 females & 7 males) and 10 EAP professionals (2 females & 8 males), from the top state universities of Tehran. They participated in the first phase of data collection, interview and were selected based on a criterion-oriented selection method. The criterion was having at least five years of experience in working in either internationalized settings or the EAP area or both and being a member of an executive committee in ELT/ESP/EAP policy-making or materials development. Although the participants were Ph.D. graduates with different academic backgrounds (TEFL or other disciplines), they all had sufficient experience in teaching in an IHE environment. Among the 19 experts, 15 professors had EAP teaching experience (10 language teachers & 5 content specialists), and four

experts were involved in policy-making and curriculum development to realized IHE in Iran.

The participants of the second phase, who were asked to review the early drafts of the interview questions, the surfaced competencies of the preliminary model, and the newly-developed questionnaire items, were two EAP experts with significant contributions in IHE and EAP. The third group included 30 EAP teachers, 22 females and 8 males, who were all Ph.D. graduates or candidates of Applied Linguistics and have taught EAP at different levels. They were selected based on convenience sampling from among the practicing EAP teachers in Iran. They participated in the pilot study. Also, their teaching experience ranged from half a year to eight years. The fourth group was 74 EAP teachers (54 females & 20 males) who participated on a volunteer basis in the validation phase.

Instrumentation

Semi-Structured Interview

The interview questions were formulated based on the literature review and EAP experts' consultation. The questions were designed to investigate the EAP and IHE-related issues (19 EAP questions and 16 IHE questions). To define the required EAP teachers' competencies, seven questions of retrospective feature probing the thoughts and feelings of the interviewees as they are engaged in specific behaviors were among the questions as well. Therefore, the participants were asked to describe their successful and unsuccessful moments of teaching practice as the identified competencies in the collected data could be highly context-specific (McClelland, 1973; Spencer & Spencer, 1999). These questions had the strength of uncovering valuable information regarding the teacher's competencies which stands above the directly observable behavior (Hitt, Woodruff, Meyers & Zhu, 2018).

EAP Teachers' Competencies Questionnaire (EAP TCQ)

The EAP teachers' competencies questionnaire (EAP TCQ) was developed after going through a process of reviewing the literature, interviewing the experts, generating the items, piloting, and then administering the final version. The newly-developed questionnaire was made up of 23 multiplechoice items which were responded to on a four-point Likert scale (from 'very much like me' to 'not at all like me'). The items were initially spread over eight dimensions of the EAP teachers' competencies model developed at the pre-piloting stage. These dimensions were as follows: EAP generic and textual knowledge (2 items), EAP socio-cultural knowledge (2 items), EAP academic research knowledge (3 items), EAP discourse orientation skills (5 items), EAP professional development skills (2 items), EAP problem solving and critical language analysis skills (4 items), EAP assessment skills (2 items), and EAP technology competence (3 items). These 23 items covered all the categories and themes suggested in the research literature and experts' interviews. However, later, as a result of exploratory and confirmatory factor analyses, the EAP TCO was conceptualized by six dimensions: disciplinary knowledge (4 items), academic literacies (5 items), critical English for academic purposes (CEAP) (4 items), pedagogical skills (5 items), disciplinary identity (2 items) and technology competence (3 items). The reliability of EAP TCQ in the pilot study was observed to be 0.92.

Data Collection Procedure

The following phases were followed for the development of the EAP Teachers' Competencies Questionnaire (EAP TCQ): literature review and interview, item generation and questionnaire development, and piloting and validating. A comprehensive literature review on theoretical bases and empirical studies of EAP teacher education has been done to identify the key competencies potentially effective to be possessed by EAP teachers. The results were fed into the interview questions. Formalities were gone

through and appointments were made with the participants. Each interview was audio-taped and lasted for approximately two hours. Later on, by content analysis of the transcribed data, the competencies specific to EAP teachers were obtained and compared with the ones collected in the literature. The results of the first phase led to the different components of EAP teachers' competencies.

All the surfaced major themes and categories were proposed in a tentative model. The categories were converted to questionnaire items and were written in statement formats. After multiple experts' judgments for item redundancy, clarity, and readability, the semifinal version of the questionnaire was prepared for the piloting phase. A pilot study was run to revise the questionnaire and, therefore, some items were made more clear and detailed. For the validating phase, 74 EAP TCQs were collected via Gmail and WhatsApp as the electronic version of the questionnaire had been sent to them. Due to the Covid-19 pandemic, the physical distribution of the questionnaire was not a possible choice. The manager of different departments snowballed the questionnaire links to assist the data procedure of this study. In general, it took three months to distribute and collect all the files. Data from all the filed questionnaires were put into PLS-SEM software to be analyzed.

Data Analysis

Given the design of the study and research question, the main procedures utilized were content analysis and validation of the proposed conceptual model for EAP teachers' competencies. To detect and confirm the latent factor structure underlying the framework, analyses of exploratory factor analysis (EFA) to determine the appropriate number of variables and confirmatory factor analysis (CFA) to confirm the hypothesized model were run. Regarding some technical issues, such as sample sizes or the distribution of data, PLS-SEM, a relatively new method among the structural equation modeling tools, was preferred as it does not require a large sample size (Chin, 2010; Nitzl, 2016; Yoo & Alavi, 2001).

RESULTS

To answer the research question posed in the current study, three steps were taken. These phases revealed the following results which are further elaborated on in this part.

Phase One: Literature Review and Interview

A close study of the literature and the content analysis of the coded data from semi-structured interviews led to the various components of EAP teachers' competencies, which are presented in the preliminary competency model, as summarized in Table 1.

Competency	Definition
EAP Generic and Textual Knowledge	 textual, contextual, and pragmatic knowledge of the specific disciplines (word formation, and terminology) particular grammatical structures and the necessary functions appropriate to the higher education context of the specific disciplines/set of discursive forms invoked by all participants in a professional activity of the specific disciplines (in written and oral academic and professional genres) discipline-specific discourses and genres of the specific disciplinary, or workplace genres to participate and achieve the goals of a specific professional community
EAP Socio- Cultural Knowledge	 socio-cultural conventions, norms, values, and practice of the specific community and/or discipline in written and oral academic and professional practice ways that language use is influenced by social and cultural contexts ways to express one's social identity in the context of constraining social structures and social processes (the
	EAP Generic and Textual Knowledge EAP Socio- Cultural

Table 1: The preliminary competency model

attempts to	mimic d	lisciplinary	approved	forms of
discourse co	nsidering t	he complex	tity and spe	ecificity of
the specific	disciplines	and their	effects on	individual
identities)	F			

- EAP
 Academic
 Research
 Knowledge
 1) epistemological and practical considerations of the five
 lines of EAP research in SFL (Systemic Functional
 Linguistics), GA (Genre Analysis), Corpus, Ac. Lits
 (Academic Literacies), and CEAP (critical English for
 academic purposes)
 2) ethical considerations of academic research in EAP
- 4 EAP 1) identifying the local academic structure (setting, participants, social roles, and goals)
 Orientation Skills
 2) identifying, constructing, interpreting a specific repertoire of professional, disciplinary, or workplace genres, and using the results of the move and step analysis
 - to achieve the goals of a specific professional community 3) responding to the recurrent and novel rhetorical situation by navigating the discursive landscape

4) devising pedagogic descriptions of specialist discourse/language use

5) exploring disciplinary variations and participating in text-intensive disciplines by using, analyzing, critiquing, reproducing, and even reshaping their genres

6) analyzing the language samples by using discourse analytic techniques of corpus analysis -genre analysis

5 EAP

 1) using language effectively in a variety of social contexts to achieve a professional goal and express one's social identity
 Skills
 2) participating in discussions and debates effectively on

2) participating in discussions and debates effectively on professional topics in a variety of social contexts appropriate to the higher education context of the specific discipline 3) adjusting the professional written and oral academic

3) adjusting the professional written and oral academic practices to the recurrent and novel academic cultural context and identifying the decent professional written and oral academic practices in a variety of social contexts

		appropriate to the higher education context of the specific discipline
6	EAP Problem- Solving and Critical Language- Analysis Skills	 using the language of critique to criticize the discursive practices and epistemologies of their fields devising pedagogic techniques to guide students to figure stuff out for themselves when they don't have a teacher at their disposal devising pedagogic techniques to guide students to negotiate, refine, and empower their discourses encouraging the students to articulate the concerns and reactions towards the current educational and ideological discourses encouraging the students to translate the resistance into action, and suggest ways to refine the actions investigating discipline-specific discourses shaping rather than simply being shaped by current educational and ideological discourses
7	EAP Assessment Skills	 assessing the EAP needs appropriate to the higher education context of the specific discipline offering effective strategies to overcome EAP learning problems the students encounter in the context of the specific discipline and enabling the learners to assess their learning
8	EAP Technology Competence	 understanding the intimidating feeling that technology tends to have, possibly due to the use of international language understanding the opportunities that the new technological trends offer to EAP in different areas using the high-powered tools to practice the taught skills (improving social learning, managing bodies of knowledge, writing RAs), ease the process of testing, evaluating individual learning, and solving the language- related problems (inside and after the classroom)

As it is shown in Table 1, the results obtained in this phase seem to demonstrate both domains of competency: knowledge and skill. EAP

generic and textual, EAP socio-cultural and EAP academic research knowledge provide the theoretical foundation of EAP teachers' competencies, while EAP discourse orientation, EAP professional development, EAP problem-solving, and critical language-analysis and EAP assessment skills account for the capabilities required to apply the theoretical and analytical knowledge of the first three competencies. The last competency, i.e., technology, which emerged only from the interview, encompasses both knowledge and skill domains and addresses the knowledge of new technological trends and skills to use the opportunities they offer in different areas of EAP.

Phase Two: Item Generation and Questionnaire Development

The results obtained in the previous phase revealed 8 competencies with 29 respective subcomponents which provided the themes of the first draft of the EAP teachers' competencies questionnaire (EAP TCQ). Given that the emerged competencies had either knowledge or skill orientation that can be observed, developed, and assessed as visible competencies (Spencer & Spencer, 1999), the competencies definition could be reworded and transformed into actual behaviors or statements that can be observed or stated by teachers. Therefore, the first draft with 22 items was prepared. The knowledge-related items (9 items) began with "I am aware of", or "I have a good understanding", and the skill-related ones (13 items) had "I can" at the beginning of the sentences.

Phase Three: Piloting and Validating

For the piloting stage, the first version of EAP TFQ with 22 items was first given to two TEFL experts with sufficient experience in IHE and EAP to review the content relevancy, clarity of language, and theoretical considerations. It resulted in the items rewording, yet no item was deleted. Then, thirty EAP teachers took EAP TFQ online and commented on the items' clarity. The comments were applied and resulted in one more item as

two questions addressed two different things and were unmerged. Therefore, in the piloting phase, the items were extended to 23 items.

For the validation stage, the EAP TFQ was administered to 74 teachers who were practicing EAP in Iran. Then, the Structural Equation Modeling at two levels of exploratory and confirmatory factor analyses was run. To extract the underlying factors, the principal component analysis (PCA) with orthogonal Varimax rotation was carried out. The exploratory factor analysis encompasses KMO and Bartlett's tests to determine the sample adequacy and the strength of the relationship among the variables within themselves and with their main variables. The results revealed that the KMO value was greater than the recommended value of 0.6 (0.834) and Bartlett's Test of Sphericity was significant (p<0.05). As Table 2 indicates, all the related statistics for the KMO and Bartlett's tests confirm the sample adequacy and the strength of the relationship among the variables.

				aj (anacio)	
Kaiser-Meyer-Olkin	Measu	ure	of	Sampling	0.83
Adequacy.					
Bartlett's Test of Sphe	ericity Ap		rox. C	hi-Square	1179.37
		Df			253
	Sig				0.001

Table 2: KMO and Bartlett's test of study variables

Using a factor loading of 0.30 and retaining the factors that contributed an eigenvalue of 1.00 or more (Hair, Hult, Ringle, & Sarstedt, 2016; Pallant, 2010) as the criteria, the 23 items loaded on six factors: Disciplinary knowledge (Qs. 1, 2, 3, & 4), Academic literacies (Qs. 6, 7, 8, 9, & 10), Critical English for academic purposes (CEAP) (Qs. 11, 14, 15, and 16), Pedagogical skills (Qs. 12, 17, 18, 19 & 20), Disciplinary identity (Qs. 5 & 13) and Technology competence (Qs. 21, 22, & 23). The eigenvalues obtained were greater than 1.00 (8.71, 2.88, 2.25, 1.67, 1.41, and 1.12), explaining a total variation of 78.5% (37.8%, 12.5% and 10%, 7%, 6% and 5%, respectively) pedagogical skills, academic purposes, disciplinary knowledge, CEAP, technology competence and disciplinary identity. It

should be noted that the first few factors always describe comparatively large amounts of variance (especially factor 1), while subsequent factors explain only small amounts of variance. The components were labeled concerning their underlying theme(s) and their theoretical basis. There were no items with double loadings as well. The factor loadings from the rotated pattern matrix are depicted in Table 3.

Item			Compo	onents		
	Pedagogica	Academic	Disciplinary	CEAP	Technology	Disciplinary
	1	Literacies	Knowledge		Competence	Identity
	Skill		-		-	
Q1			0.87			
Q2			0.88			
Q3			0.83			
Q3 Q4			0.79			
Q5						0.77
Q6		0.79				
Q7		0.76				
Q8		0.78				
Q9		0.72				
Q10		0.81				
Q11				0.81		
Q12	0.74					
Q13						0.86
Q14				0.82		
Q15				0.82		
Q16				0.84		
Q17	0.76					
Q18	0.82					
Q19	0.79					
Q20	0.85					
Q21					0.84	
Q22					0.82	
Q23					0.80	

Table 3: Factor structure matrix of loading variable

To determine the internal consistency of the 23 items, Cronbach's coefficient was calculated. The six evaluated dimensions showed a rigid internal consistency in both pilot and final administration. As the exclusion

of none of the items did not improve the instrument's overall reliability, all the items were kept in the final administration with a Cronbach alpha coefficient of 0.92 that guarantees the instrument's reliability.

The extracted factors were observed to be corresponding to the eight competencies extracted from the content analysis. Put it differently, the eight competencies proposed in the preliminary competency model were grouped into knowledge and skills subscales, while the six extracted factors reflect the underlying concerns of the eight competencies. The previously defined competencies, now, have been regrouped economically, resulting in competencies where the knowledge and skills aspect of the related themes were adjoined. The two competencies of disciplinary knowledge and pedagogical skills were labeled based on their focus as they encompass a wide range of theoretical issues and practical considerations respectively.

The six components were thus chosen to form the basis of the subscales of the newly developed measure of EAP teachers' competencies. Further analysis of the two components of academic literacies and CEAP resulted in a simpler model. These two components have already been addressed by some scholars (Bruce, 2011, Ding & Bruce, 2017; Ding & Campion, 2016) as the main lines of research in EAP. Hence, these two components were decided to be subsumed under the higher-order component of EAP literacies. The main contribution of the Academic Literacies (Ac Lits) approach is raising the awareness of the members of the discourse community (Ding & Bruce, 2017), while CEAP is concerned with enabling the learners to criticize the educational practices shaping the academic goals (Hyland, 2006) and understand the influence of ideology and power on their academic life. This means that these two conceptualizations cannot be seen separately from each other; although they are conceptually distinct, they are inextricably intertwined.

For the validation purpose of the theoretical model of competencies consisting of five competencies, with one competency displayed at two layers (Figure 1), CFA was used. Convergent validity and discriminant validity are important at this stage.

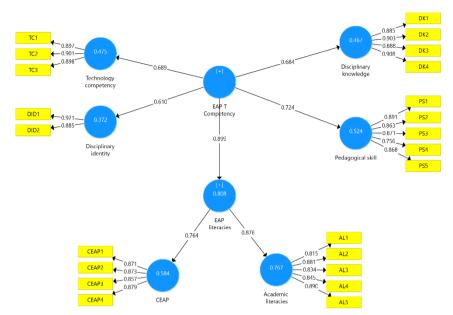


Figure 1: Estimated factor loadings from the CFA testing the EAP teachers' competency model with the correlation between factors

The degree that multiple items measure the same concept is convergent validity. In this analysis, factor loadings, composite reliability, and average variance, as suggested by Hair et al. (2016), were extracted to assess the convergent validity. The recommended values for the loadings were set at > 0.5, the average variance extracted (AVE) should be > 0.5, and the composite reliability (CR) should be > 0.7. AVE values ranged between 0.52 (EAP T competency) and 0.81 (Disciplinary identity) and CR values ranged between 0.80 (Academic literacies) and 0.94 (Disciplinary knowledge). Thus, all the AVE and CR values were above the threshold, indicating that the five factors were strongly associated with EAP teachers' competencies variable (Table 4).

Construct	CA	rho_	CR	AVE
		А		
EAP literacies	0.87	0.87	0.80	0.67
CEAP	0.89	0.89	0.92	0.75
Disciplinary identity	0.77	0.79	0.89	0.81
Disciplinary knowledge	0.91	0.93	0.94	0.80
EAP T competency	0.92	0.92	0.84	0.52
Technology competence	0.88	0.88	0.92	0.80
Academic literacies	0.90	0.90	0.93	0.72
pedagogical skills	0.90	0.92	0.92	0.72

Table 4: Construct reliability and convergent validity of five competencies

Note: AVE = Average Variance Extracted, CR = Composite Reliability, CA=Cronbach Alpha.

The discriminant validity is a complementary concept of convergent validity which shows that two conceptually different constructs should exhibit differently and are expected not to be un-dimensional (Henseler & Fassott, 2010). In this study, the discriminant validity at the construct level was investigated using Fornell and Larcker's (1991) criterion, while the item level was inspected by Chin (1998) criterion. Fornell and Larcker's (1981) criterion proposes that the square root of AVE for each construct should be greater than the other construct's correlation. At item-level discriminant validity, the Chin (1998) criterion suggests that cross-loading should be lower than 0.5 .As indicated in Table 5, none of the inter-construct correlation values was above the square root of the AVE, and that they fulfilled the criterion of the discriminant validity at the construct level. In Table 6, the factor loading of each of the measuring items within the construct was higher than all of its cross-loadings in the row and column. Therefore, the results provided strong evidence for the item-level discriminant validity of the scale, that is, each item is highly correlated with its corresponding factor and not with the other factor.

Item	CEAP	Disciplinary Identity	Disciplinary Knowledge	Technology Competence	Academic Literacies	Pedagogical Skill
AL1	0.27	0.25	0.291	0.43	0.81	0.36
AL2	0.28	0.35	0.53	0.35	0.88	0.45
AL3	0.31	0.39	0.30	0.31	0.83	0.43
AL4	0.31	0.36	0.37	0.35	0.84	0.53
AL5	0.32	0.27	0.39	0.33	0.89	0.51
CEAP1	0.87	0.36	0.42	0.24	0.35	0.35
CEAP2	0.87	0.36	0.36	0.34	0.37	0.3
CEAP3	0.85	0.37	0.27	0.29	0.26	0.33
CEAP4	0.87	0.35	0.31	0.34	0.23	0.34
DID1	0.43	0.92	0.41	0.36	0.31	0.36
DID1	0.31	0.88	0.26	0.30	0.39	0.22
DK1	0.28	0.28	0.88	0.36	0.33	0.16
DK2	0.33	0.32	0.90	0.30	0.37	0.06
DK3	0.31	0.27	0.88	0.38	0.42	0.19
DK4	0.46	0.45	0.90	0.49	0.45	0.31
PS1	0.52	0.39	0.25	0.41	0.54	0.89
PS2	0.3	0.32	0.14	0.33	0.49	0.86
PS3	0.26	0.26	0.18	0.34	0.45	0.87
PS4	0.22	0.13	0.10	0.30	0.28	0.75
PS5	0.26	0.25	0.21	0.30	0.46	0.86
TC1	0.30	0.35	0.36	0.89	0.36	0.33
TC2	0.33	0.32	0.38	0.90	0.34	0.39
TC3	0.30	0.34	0.43	0.89	0.42	0.37

Table 5: Outer/Factor loading with cross-loadings (discriminant validity at construct-level)

valiality at item level)						
Construct	CEAP	DI	DK	TC	AL	PS
CEAP	0.87					
Disciplinary Identity	0.41	0.90				
Disciplinary	0.39	0.38	0.89			
Knowledge						
Technology	0.35	0.37	0.44	0.89		
Competence						
Academic Literacies	0.35	0.38	0.45	0.42	0.85	
Pedagogical Skill	0.38	0.33	0.21	0.40	0.53	0.85

Table 6: Square root AVE and correlations of latent variables (discriminant validity at item-level)

*The diagonal figures in bold indicate the Square root of average variances extracted (AVE) for constructs.

DISCUSSION

This study explored the underlying factors of EAP teachers' competencies fitting the canons of IHE, suggested a competency model representing the needed competencies of EAP teachers, and validated the model and the newly-developed scale. Furthermore, providing adequate descriptions for these competencies, disciplinary knowledge, disciplinary identity, pedagogical skill, critical English for academic purposes (CEAP), academic literacies, and technology competence was a great move forward to solve the existing confusion regarding the concept of competency in this regard.

As the findings indicate, the most contributing factor to EAP teachers' competencies has been labeled *Pedagogical Skills*, including five items concerning professional development, problem-solving and critical thinking analysis, and EAP assessment skills. The loading of the items in these three areas on the first extracted factor underscores the importance of EAP teachers' pedagogical abilities to understand, plan, and assess the activities required for specific academic contexts. Jarvis (1983) considers this competency as the general language teaching skills of course planning and devising syllabus in ESP/EAP. CFTEAP (BALEAP, 2008, 2014), as the only framework that claims to offer a well-articulated and structured set of

competencies, also includes student needs, teaching practice, and assessment and feedback practice in 6 of the 12 discussed competencies and addresses EAP practical teaching issues' concerns as the *Course Delivery*. Basturkmen (2010) also elaborates on the needed skills of EAP teachers and underscores the knowledge of EAP teaching, discussing instruction in the specialist language, course development, needs analysis, investigating specialist discourse, devising pedagogical description of that discourse, and assessment of the specialist language. More recently, Hyland and Shaw (2016) have suggested that particular tasks and activities must also be offered to EAP teachers to include pedagogic genres like seminar presentations, Ph.D. supervision, and dissertation defense (Hyland & Shaw, 2016).

The next influencing factor, with five items, includes the main concern of the Ac Lits approach and is called Academic Literacies. Ac Lits competency explores the ability "to use, manipulate, and control language and cognitive abilities for specific purposes and in specific contexts" (van Dyk, & van de Poel, 2013, p. 56). It is also concerned with the "understanding of how texts and discourses can be constructed, deconstructed and reconstructed to represent, contest and, indeed, transform the material, social, and semiotic relations" (Luke & Dooley, 2011, p. 856). In other words, it has strong ideological concerns to transform the agenda, conventions, and practices of the academy (Ding & Bruce, 2017; Hyland & Shaw, 2016). The items are concerned with EAP academic research knowledge and teachers' capabilities concerning SFL (Systemic Functional Linguistics), GA (Genre Analysis), and corpus linguistics reflecting the discourse orientation skills of EAP teachers. In other words, academic literacies encompass both knowledge and skill domains as a competency, which are equally important, and require employing the knowledge of genre and discourse analysis and applying them in EAP practice. Ding and Bruce (2017) contend that SFL, GA, and corpus linguistics are the integral lines of EAP research that construct the field underpinnings. The revised version of BALEAP (2014) also emphasizes the existence of the standards that must be employed and practiced by EAP teachers in all the individual and collaborative academic activities of the discipline; CFTEAP addressed these concerns as the *Professional Development, Research, and Scholarship competency*. According to Hyland & Shaw (2016), investigating the detailed discoursal requirements of different disciplines is the centrality of the Ac Lits approach which is the concern of this competency and the respective five items.

On the other hand, the obtained results to unravel Ac Lits components is partly consistent with that of Zand-Moghadam and Khanlarzadeh (2020); they explored eight relevant factors contributing to academic literacy and among which, only three factors of familiarity with different genres, academic ethics and honesty, and target discourse community are found contributing to Ac Lits concepts while other extracted factors of their study have been addressed in other components of the developed model in this study. One possible explanation can be the broadness of the EAP teachers' competencies in this study compared to that of Zand-Moghadam and Khanlarzadeh (2020) regarding the construct of Academic Literacy.

Another influencing factor is *Disciplinary Knowledge*, which is labeled based on the themes of the loaded items. The themes of EAP Generic and Textual Knowledge and EAP Socio-Cultural Knowledge, emerged from the results of the content analysis, encompass the established areas of EAP, the linguistic and discoursal structures of academic texts, analyses of the textual practices of academics, and appropriate genres for socialization into the discourse community. As the knowledge basis of EAP teaching competency, this competency is in line with the findings of BALEAP (2008, 2014), Bruce (2011) Charles (2013), and Ding and Bruce (2017), suggesting that the investigation of the social use of language and social context can assist teachers in their socialization into the discourse community. Disciplinary Knowledge is concerned with the two theoretical approaches of SFL, and genre-analysis, as the most influential research streams contributing to the knowledge-base of EAP (Ding & Bruce, 2017; Hyland & Shaw, 2016,). According to the first area of the first competency in BALEAP, academic contexts need knowledge of the organizational, educational, and communicative policies, practices, values, and conventions of universities. It can, thus, be claimed that pedagogical skills, academic literacies, and disciplinary knowledge make the rigid core of EAP competencies on which other competencies, regardless of their orientation (knowledge or skill), must be developed.

The fourth extracted factor, Critical English for Academic Purposes Competency (CEAP), is concerned with EAP teachers' capability to reevaluate the EAP practices, recognize multiple literacies and enhance the learning conditions for all the learners. This competency corresponds with the critical thinking competency of CFTEAP (BALEAP, 2008, 2014), and the CEAP line of research according to Ding and Bruce's (2017) suggestions for the foundation of EAP teaching. Critical thinking ability as one of the components of academic literacy has also been addressed in the findings of Zand-Moghadam and Khanlarzadeh (2020).

Therefore, the development of CEAP competency, a critical understanding of the knowledge base of EAP, resulting from Ac Lits competency development can be deemed as an indispensable part of any EAP practice (Ding & Bruce, 2017). Even from the IHE perspective, the faculty members must be "willing to analyze, interpret, and reevaluate their cross-cultural interactions" (Coryell et al., 2012, p. 76). Given the disciplinary heterogeneity characteristic of modern universities (Hyland, 2006), the view of multiple literacies may be in line with the IHE policies (Hyland & Shaw, 2016) to meet the needs of modern universities.

Technology competence is the next extracted factor that has not received due attention in the EAP literature. It can be defined as the capability of dealing with multimodal academic discourses of textbooks, websites, and classrooms (Chun, 2015), using them in "a productive, creative, critical, safe, and ethical way" (White, 2015, p. 24), addressing the dangers of online plagiarism (Li, 2020), and enhancing the EAP teaching by using the Internet and associated technology (Walker, 2014), for instance,

moving towards reflective writing for instance or nonlinear approach to reading (Dudeney, Hockly, & Pegrum, 2018). As it is stated by Atai and Khazaee (2014), EAP teachers should be provided with the opportunities first to "obtain the knowledge" in this regard and next "to integrate technology in their classes" (p. 25) for improving the quality of their EAP teaching practice. The extraction of this factor is partly consistent with the results of Zand-Moghadam and Khanlarzadeh's (2020) study, labeled differently as computer literacy or the ability to work with the computer as one of the components of academic literacy needed by EAP teachers. This competency thus far has not been discussed in teacher education programs and EAP teachers lack the required competency to use the available technology proficiently (Li, 2020).

Finally, another related issue to the EAP teachers' competencies is teacher identity. It was observed that items 5 and 13 loaded on the same component with the underlying theme of identity expression in a variety of national and international contexts. *Disciplinary Identity Competency* is the EAP teachers' ability to struggle with equivocal expectations that may exist in different EAP departments with either conceptualization of support service or an independent academic field. Pedagogical chaos of EAP (Atai & Khazaee, 2014) which is due to the existing tension between support service and academic field of study can influence the EAP practitioners' identity and their sense of commitment (Ding & Bruce, 2017). Either stance of support service or independent academic field entails different conceptualizations and different institutional expectations (Morgan & Clarke, 2011) that might lead to the EAP teachers' dysfunctional, confused, and conflicted identities accordingly (Ding & Bruce, 2017).

Hyland (2006) contends that the junior status of support service leads to the teachers' de-professionalizing situation that only involves general proficiency development, the four skills, linguistic knowledge, and communicative and study skills. On the other hand, EAP conceptualization as an academic field of study, as stated by Ding and Bruce (2017), involves developing the learners' awareness of the roles of contexts, discipline, and genre on language use, and therefore, teachers develop the identity of discourse analysts, employ the available analytical methods to unravel the discursive complexity of particular disciplinary discourses, and inject their understandings into their practice. Li (2020) underscores the significance of exploring EAP teachers' identity-related issues as there is a remarkable lack of attention to these areas in the theoretical and research literature of EAP (Ding & Bruce, 2017).

In a parallel line of discussion, regarding IHE, the concerns of the first factor, i.e, pedagogical skill, have been mentioned rather vaguely in the first four clusters of the qualifications of the Teeken's (2003) "Ideal Lecturer," which were identified as the issues related to using English as the language of instruction, dealing with cultural differences, and considering different teaching and learning styles. Discussing these broad competencies with inadequate elaborations is partly due to the fact that the definitions of the concepts of skills, knowledge, and competencies in IHE have created much confusion and are often used interchangeably (van der Werf, 2012); therefore, it can even be stated the first cluster of issues related to using English as the language of instruction is in line with knowledge-related subscales of Ac Lits and CEAP, i.e., the second and fourth factors. The fourth cluster of "insights into the cultural implications of using media and technology" (Teeken, 2003, p. 111) also gives support to the technology competence. Similarly, the fifth ability concerning the special needs of teaching the academic requirements of a discipline can juxtapose with the disciplinary knowledge concept. Considering van der Werf's (2012) matrix of competencies, the research competence, and the two tasks of conducting research in English, and publication in English can correspond with the subscales of EAP literacies as revealed in this study. However, notwithstanding these correspondences with the limited findings of studies conducted in IHE, no data was found in the IHE literature on the teachers' needed qualities for teaching at the IHE scale.

In retrospect, as regards competency, studies in the field of IHE only addressed the global domains, and have not delved into the competencies of English language teaching and taken the acquisition of thereof for granted. Conversely, EAP studies have focused either narrowly on reading and writing skills, or exclusively on the subscales of the discussed competencies, such as EAP need analysis. Therefore, the results of the present study can be significant in this regard. First, the development of these competencies can result in stepping away from the service stance and looking toward perceiving EAP as an independent subject possessing its genres and discourses (Hyland, 2006). Second, as a result of EAP independence, EAP teachers' identity becomes prominence; therefore, EAP teachers develop a sense of responsibility and professionalism (Ding & Bruce, 2017; Martin, 2014) by acquiring various competencies which are exclusively related to their areas of practice.

CONCLUSION AND IMPLICATIONS

After carrying out multiple factor analyses, a questionnaire with adequate psychometric properties that gave it validity for the assessment of EAP teachers' competencies from the perspective of IHE was developed. The obtained findings through the Structural Equational Modeling approach revealed that there are six factors underlying EAP teachers' competencies: disciplinary knowledge, disciplinary identity, pedagogical skill, critical English for academic purposes (CEAP), academic literacies, and technology competence. The result of this study is significant as the proposed model attempted to compensate for the methodological inadequacy of CFTEAP, offer well-articulated descriptions for a set of EAP competencies, and integrate the existing discussions concerning EAP teaching competencies.

Several conclusions can be drawn from this study. First, the findings highlighted the significant contribution of both knowledge and skill to teaching competencies as competencies of both orientations exist among the extracted factors. This is indicative of the fact that competency is a broader concept encompassing EAP knowledge base, academic literacies, and skills. Second, the results also revealed the components of the complex competencies of academic literacies and CEAP, as inextricably interwoven constructs, which were later labeled as EAP literacies. Finally, the findings stressed the disciplinary identity concept and technology competence that have never been addressed in any models or frameworks and are in dire need of further theoretical and empirical support.

As for the implications of the study, policy-makers, EAP experts, and teacher educators, who are in charge of developing education programs, should pay particular attention to EAP teachers' competencies development. Future EAP teacher education programs, including the discussed EAP competencies and knowledge base, can explore, practice, and inform the EAP teaching practice and, therefore, save the EAP teacher education programs, specifically the one in Iran from the status of "incoherent educational experience" (Atai, 2002, p. 11). Moreover, pre-service or inservice training programs and workshops can offer different coping strategies for EAP newcomers and design tasks concerning the needed competencies to handle the job requirements in teaching EAP courses (Nazari, Atai, & Birjandi, 2018). Furthermore, EAP teachers can evaluate their competencies in knowledge and skill domains, reflect on their EAP practice, and develop the less-developed ones.

In the context of this study, as the academic setting is heading toward IHE with recent activities, such as the recruitment of international students from Afghanistan, Iraq, and other Middle Eastern countries (Rahimi Golkhandan, 2017), the need for highly competent EAP teachers working in the internationalization environment has been dramatically high. Regarding the increases in the number of international students and the shift from first/native language to English-medium education in some universities in Iran, this study implies the necessity of including the EAP teachers' competency model, informed by the insights from IHE, in the pedagogical requirements of all the courses.

Disclosure statement

No potential conflict of interest was reported by the authors.

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