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A Mixed-Methods Study Into the Discipline-Specific Effect of Critical EAP on Reading Comprehension

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Abstract

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Although critical English for academic purposes (CEAP) has grown theoretically, more research is needed to explore it in more depth. This sequential mixed-methods study primarily aimed to examine whether the CEAP and traditional English for academic purposes (EAP) have different impacts on Iranian university students' English reading comprehension, and (if yes) whether it is discipline-specific. This study also intended to explore how traditional EAP students' preferences aligned with the CEAP principles. To this end, a sample of 100 Iranian university students of computer sciences and architecture with intermediate level of English proficiency was initially selected through convenience sampling. They were then randomly assigned to two control groups and two experimental groups, consisting of 25 participants each. Then, two piloted researcher-made reading tests were administered to all groups as a pre-test. The experimental computer sciences and architecture groups were taught using the CEAP pedagogy. Hence, the syllabus was negotiated based on the CEAP principles. The control computer sciences and architecture groups received the traditional EAP as their placebos. They were taught the curricular textbooks. After the treatment, all groups were asked to complete their posttests. Two-way ANOVA results indicated that the CEAP groups significantly outperformed the traditional EAP groups on the posttests. It was also found that the effect of the CEAP pedagogy was not discipline-specific. Additionally, the results of qualitative data analysis revealed a lack of preference for the traditional EAP programs among the interviewees in favor of the CEAP. Implications are offered for EAP teachers, students, and material developers.

Keywords: Critical English for academic purposes, English for academic purposes, English for specific purposes, reading comprehension, sequential mixed-methods study.

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1. Introduction

Due to the growing number of prospective university students in English-medium departments around the world, there is a widespread demand for English for specific purposes (ESP) (Arnó-Macià et al., 2020). Yet, as the foremost branch of ESP, English for academic purposes (EAP) emphasizes the scholastic dimension of ESP (Anthony, 2018). According to Bruce (2021), EAP involves the study of English for enrolling in higher education. It is a teaching specialization that consistently puts the academy first (MacDonald, 2016).

In fact, the traditional camp of EAP seeks to impart the fundamental literacy norms and generic academic skills needed to properly respond to formal assignments in secondary and post-secondary education (Li, 2020). Additionally, a traditional EAP course aims to transfer knowledge structures and a set of linguistic systems (Hyland, 2012). Overall, traditionalism in EAP ends in the knowledge hierarchies in educational systems (Bingham & Biesta, 2010). Moreover, there have been some voices in the literature on the discipline-specificity of the EAP methodology. According to Dudley-Evans and St. John (1998), the foundation of EAP methodology should reflect the approaches of the fields it serves. Widdowson (1983) also accused ESP researchers and practitioners of “leaving considerations of appropriate methodology entirely out of account” (p.100).

Challenging the traditional EAP academia, Benesch (2001, 2009) called for a need to prepare students for target-situation demands within her EAP framework, which necessitates critical pedagogy (CP). Generally speaking, CP is a contextual, dialectical method that puts the transformation of repressive settings above students' needs and goals (Darder, 2018). Furthermore, CP examines contexts and reacts to them while maintaining humility and a belief in change to free both the oppressed and the oppressor (Marr, 2021). Given all the above, it seems that critical pedagogy, *inter alia* CEAP, considers the social and political features of teaching and learning in academic contexts to develop students' critical literacy.

All in all, despite the emphasis put on criticality in the EAP pedagogy to reform the academic institutions (Benesch, 2001), and all the endeavors in the field of EAP in Iran (e.g., Atai et al., 2018; Atai & Nazari, 2011; Movahhedi et al., 2023; Soodmand Afshar & Movassagh, 2016), several EAP researchers (e.g., Kiany & Khayyamdar, 2005; Shahidipour & Tahririan, 2017; Tavakoli & Tavakol, 2018) agree that the EAP pedagogy in Iran is still under the influence of the EAP traditionalism as it is characterized by the similarity of language use in different EAP textbooks, inattention to learner-centered communication in designing the course, and inattention to recent developments in EAP education (see Li, 2020). For these reasons, it seems expedient to critically inspect the practices and materials in Iranian EAP

pedagogy (see Li, 2020; Macallister, 2016). To address such gaps, the CEAP pedagogy may help EAP students address their real-world needs, communicate with their teachers in creating suitable syllabi, receive assistance from their instructors in accomplishing their needs and goals, and act as agentive directors within the framework.

Given the background, it appears there is a wide gap in the literature on the experimental research into the effectiveness of the CEAP pedagogy on ESP students' reading comprehension (RC) in the Iranian academic context. Therefore, this study aimed to compare the discipline-specific effects of the traditional EAP and critical EAP pedagogies on the RC of Iranian EAP students and explore the ESP students' preferences for the traditional EAP pedagogy. For the purpose of this two-phased mixed-methods study with QUAN-QUAL nature (Hashemi & Babaii, 2013), designed "to generate integrated support for a theory [i.e., CEAP] based upon quantitative and qualitative evidence" (American Psychological Association, 2020), the following research questions were put forward:

1. Are there any statistically significant differences among the effects of the EAP and CEAP pedagogies on the reading comprehension of Iranian ESP students, majoring in computer sciences and architecture?
2. To what extent do the traditional EAP students' preferences for the traditional EAP align with the CEAP principles?

2. Literature Review

2.1. Critical English for Academic Purposes

Benesch (2001, 2009) expounded on the concept of CEAP to show the restrictions of traditional EAP. In the same vein, Benesch (2013) CEAP identified as a form of CP that maintains the goal of assisting students in navigating academic discourses and disciplines while challenging the idea that academic conventions are inescapably logical and unassailable. Similarly, Darder (2018) stated that CEAP is an outgrowth of critical pedagogy, which aims to instill criticality in the learners.

Accordingly, CEAP considers hope and dialogue as concepts that distinguish CEAP and EAP and views education as an endeavor to develop human presence, not as a mere set of techniques for the fulfillment of institutional objectives. As put by Belcher (2009), needs analysis is defined as rights analysis to accommodate students as target communities of practice in tandem with people of power.

In the same vein, the proponents of CEAP tried to consider the sociopolitical aspects of the academic context to develop students' critical literacy (Li, 2020). Hence, such pedagogy encourages students to reflect on their learning (Bronner, 2017). Moreover, it fosters critical thinking, which views reality as in a state of flux (Benesch, 2009). As such, the duty of the

teacher educator ought to foster learners' critical and independent thinking (Kavenuke & Muthanna, 2021). According to Prior et al. (2011), academic reading courses should encourage students to engage in active, in-depth thoughts. Consequently, an EAP program should take into account a variety of goals, such as understating the purposes of texts, information searching, understanding broad concepts, as well as synthesizing and assessing information (Karimi & Ghorbanchian, 2022; Martiarini, 2018).

2.2. Empirical Studies

An array of studies has been done on ESP and EAP courses recently. Atai and Nazari (2011) conducted an extensive assessment of the RC requirements for health information management students in an EAP course. The findings indicated that the general English proficiency and the RC scores of undergraduate students were insufficient for the EAP course. In addition, Sharndama et al. (2014) investigated the effect of an EAP course on the enhancement of the learners' proficiency in English language skills. The results showed that the EAP affected the participants' achievement in their courses of study rather than general English. The results also revealed that the EAP course is not offered based on students' language needs for learning English. Additionally, Helmer (2013) employed the CEAP framework to evaluate an EAP writing program at a US college. It was found that students' learning gaps or deficiencies have been created by a lack of program cohesiveness, consistency, and oversight.

Furthermore, Khany and Tarlani-Aliabadi (2016) examined the extent to which the EAP curriculum was influenced by the EAP students and teachers' comments. The results showed that there was little or no collaboration between learners, practitioners, and departments when developing the EAP curricula. Moreover, Soodmand Afshar and Movassagh (2021) analyzed the influence of a critical teacher education course (CTEC) on the reconstruction of thirteen EFL teachers' professional identity. Eventually, the participation in the CTEC caused their identities as educators to shift from adherence to established norms to an alignment with critical viewpoints.

Recently, Mortenson (2022) examined the difficulties and opportunities of using the content that addresses racial injustices in a writing course in the US now and then. The findings revealed that the students were frequently denied the opportunity to apply critical thinking skills in their studies of the English language despite their enthusiasm and commitment to critically study the covered topics. Most recently, Jakonen and Duran (2024) utilized conversation analysis to investigate a teacher's practices from the standpoint of a learner-centered EAP pedagogy. They found that tutorial

interactions are collaborative and negotiated, suggesting that EAP practitioners should endeavor to foster learner-centeredness in practice.

3. Method

3.1. Research Design

The sequential exploratory mixed-methods design (i.e., QUAN → QUAL) was chosen for this study (see Hashemi & Babaii, 2013). In the quantitative phase, a quasi-experimental study with a pretest/posttest, control group design was planned. The independent variable was the CEAP pedagogy and the dependent variable was the RC of specialized texts in the courses of English for the students of computer sciences and architecture. Four intact ESP (so-called in Iran) classrooms were randomly assigned to two treatment groups and two placebo groups (i.e., computer sciences and architecture). The reason for choosing that design was to control for the possible effects of discipline-specific variances between the two fields of study (i.e., computer sciences and architecture), and preserve the internal research validity. Afterward, a qualitative phase (i.e., phenomenological analysis) was run to analyze the experiences of the traditional EAP students to unearth the alignment of their EAP preferences with the CEAP pedagogy.

3.2. Participants

A sample of 100 out of 115 female and male students, selected through convenience sampling technique from both Iranian state-run and private universities in a city in central Iran, took part in this research. Their ages ranged from 19 to 32 ($M = 20.77$, $SD = 2.49$). They were found to be at the intermediate level of English proficiency based on the homogenization results. Then, they were randomly assigned to two treatment groups and two placebo groups, each consisting of 25 participants. The two experimental ESP classes (i.e., computer sciences and architecture) received CEAP as treatment, and the other two classes of the computer sciences and architecture students functioned as the control groups, taught through the traditional EAP as placebo.

Moreover, the cases of the qualitative phase were 10 ESP students of computer sciences and architecture from the control groups ($n_{\text{computer sciences}} = 5$, $n_{\text{architecture}} = 5$), who answered the interview questions. They were selected based on the criterion (i.e., having passed the ESP courses for the students of computer sciences and architecture) set before the sampling procedure was run (Dörnyei, 2007). They were Iranians and native Persian speakers.

3.3. Materials and Instruments

3.3.1. Materials

Based on the purpose of this study, two textbooks, titled *English for the Students of Computer* (Ayat et al., 2014) and *Special English for the Students of Computer* (Haghani, 2005), were used for selecting 12 topics on computer sciences. Moreover, 12 topics were chosen from two other textbooks *English for the Students of Architecture* by Farahady (2005) and Rastegar-poor (2003). These books were published by the organization of SAMT, a leading state-led organization for preparing and publishing academic textbooks in Iran. The procedures of how these topics were selected are elaborated in the next subsection.

3.3.2. Quick Oxford Placement Test

Additionally, the version 1 of the Quick Oxford Placement Test was utilized to warrant the sample's English homogeneity. It was developed by Oxford University Press (2001). Geranpayeh (2003) validated the test based on the CEFR. It is a valid standardized test, composed of 60 multiple-choice items (Beeston, 2000; Jones, 2000).

3.3.3. Reading Comprehension Pretests and Posttests

Two thirty-item multiple-choice tests were developed to measure the participants' RC. Both pre- and posttests were developed by reverse-engineering (Davidson & Fulcher, 2020) the sample tests from Barron's TOEFL iBT (Sharpe, 2010) and Peterson's TOEFL Reading Flash (Broukal, 1997). The expert-wised tests were piloted with two groups of thirty ESP students, reflecting the main participants' features in terms of field of study and language proficiency in English. The internal consistency of the RC tests was confirmed using the Cronbach alpha method ($\alpha_{\text{computer sciences}}=0.88$ and $\alpha_{\text{architecture students}}=0.89$).

3.3.4. Interview Protocol

For the second phase of the study, a semi-structured interview guide, including five main content questions, was designed based on Benesch's (2001) CEAP framework (Appendix A). According to Creswell (2013), interviewing is an instrument to elicit data from the individuals that experienced a phenomenon under question (i.e., EAP pedagogy). It's noteworthy that these questions were drawn from the items, which had been reviewed and confirmed by Sara Benesch through personal correspondence on ResearchGate. The interview questions are presented before the excerpts in the Results section to provide the "relevant contextual information for findings" (Levitt, et al., 2018, p. 36).

3.4. Procedure

Initially, a sample of four ESP classes, comprised of 115 students, was selected from two Iranian state-run and private universities through the convenience sampling technique. The decision as to which groups received the treatments was made randomly. Then, to homogenize the sample in terms of English proficiency, the Quick Oxford Placement Test was administered to all participants. Afterward, 100 students, identified as intermediates in the matter of English proficiency, were selected.

Subsequently, each of the two researcher-made reading pretests were administered to the related groups (i.e., computer sciences and architecture) before the treatment sessions. At the treatment phase, the experimental groups (i.e., one computer sciences group and one architecture group) were taught for five weeks according to the following procedures, developed based on Benesch's (2001) CEAP pedagogy, and then expert-wised by her upon the request of one of the researchers of the study through personal correspondence on ResearchGate.

Afterward, in the experimental groups (i.e., CEAP classrooms), the syllabus was neither predetermined nor imposed by the teacher or institution (Benesch, 2001). By the same token, the syllabus was constructed dialogically, providing a chance for the class members to engage in a group dialog (Benesch, 2001). To that end, the CEAP teacher chose 22 topics from the ESP coursebooks of each discipline and presented them to the participants so that they might negotiate and select the topics based "on their experience and interest" (Benesch, 2001, p.76). Accordingly, they studied and interrogated their "linguistic and cognitive challenges" with those topics in their courses (Benesch, 2001), rather than unconditionally accepting them.

For that purpose, the teacher instructed the whole group to rely on their experiences and interests for topic choice because a crucial aspect of community development in a critical classroom is democratic decision-making, which is necessary when choosing a common topic for the entire class (Benesch, 2001). As such, as Benesch (2001) stated, the CEAP teacher's role was to keep the conversation regarding the subject and support any responses that came. For the same reason, the teacher encouraged the participation of all students and welcomed all participants' remarks. Moreover, the participants' role was to share their topic choices with the other class members and explain the choices upon the request of others, which led to the discussions of unmapped issues and ideas. As a result, it involved students in developing the EAP curriculum as they learned about the demands (Benesch, 2001). Then, the participants selected the topics they needed most and were asked to gather relevant information on them from different sources (e.g., journals, books, electronic sources, etc.). Finally, the participants presented one topic clearly

in every session and explained the terms and concepts, and engaged in challenging and critical dialogues over the presented topic.

In the control groups (i.e., one computer sciences group and one architecture group), the traditional method of EAP teaching was used. In keeping with Benesch (2001), the traditional EAP syllabus adhered to the curricular requirements, and the participants were not involved in syllabus design. For the same reason, the topics from the content course were assigned by the teacher, excluding students' contribution to the syllabus and curricular decision-making (Benesch, 2001). In the same vein, the participants were required to study the textbook chosen by the language teacher as the syllabus was predetermined by the curriculum and was imposed by the teacher, and the curricular goals just focused on content course goals (Benesch, 2001). The teacher prepared the students for the demands, which their academic programs would place on them, pursuing the objectives of the course such as the micro-skills of reading (Benesch, 2001).

Accordingly, the teacher translated the reading passages and defined new words, and students noted down the translations, sometimes definitions in English, and equivalents in their first language (i.e., Persian). Hence, most of the class time was devoted to comprehending the reading passages (Benesch, 2001). As a consequence, there was little collaboration between the teacher and students in the control groups, and the teacher did not allow the participants to choose any topics to meet the expectations of the target contexts (Benesch, 2001). Afterward, the students did the relevant exercises in the imposed textbooks. Finally, the teacher checked their responses. After five weeks of treatment, the RC posttests were administered to all participants, and the collected quantitative data were analyzed.

In the second phase of the study, the face-to-face semi-structured interviews were run with 10 participants of the quantitative phase (i.e., 10 ESP students) to discover the alignment of their preferences for the traditional EAP pedagogy with the CEAP principles. The reason for the use of this interview type was that there was "a good enough overview of the phenomenon ... to develop broad questions about the topic in advance" (Dörnyei, 2007, pp.134-135).

Before running an interview, each interviewee was briefed on these concepts for five minutes at the beginning of each interview to ensure that no misunderstanding occurred during data collection. To anonymize the interviewees' identities, care was taken not to reveal their details. The interviews were recorded and transcribed. After carefully reading the responses, the experiences that each respondent expressed in their replies to the interview questions were coded in line with the CEAP themes (i.e., broad units of information that consist of several codes). Finally, the coded statements were classified in the context of the prefigured CEAP themes.

Methodological rigor was met through validation of data analysis and coding, which were replicated by a senior researcher, who had a PhD in applied linguistics (Creswell, 2013). Moreover, to achieve research validity, verification was fulfilled through literature searches, using an adequate sample, and interviewing until data saturation (Meadows & Morse, 2001).

3.5. Data Analysis

For quantitative data analysis, Statistical Package for Social Sciences version 24.0 was used. Initially, the reliability indices were examined, using the Cronbach alpha method after piloting the researcher-made RC tests. To check the homogeneity of all groups' variances, Levene's test was run (Dörnyei, 2007). Additionally, a two-way analysis of variance (ANOVA) was employed to answer the research question.

In the second phase, a phenomenological analysis, was run to interpret the interviews' experiences in the phenomenon under study (i.e., the EAP pedagogy). Hence, the interview data were transcribed and organized, coded based on the prefigured CEAP themes (i.e., needs/rights, power, and hope/dialog), and finally represented and interpreted in the discussion (Creswell, 2013). To that end, one of the researchers perused the interview transcripts to get a complete picture of the interview data as a whole. Then, the tenets of the CEAP theoretical framework were used as prefigured themes. According to Creswell (2013), the main researcher looked for statements or "individual experiences" in the transcripts in line with the prefigured CEAP themes. Afterward, the "what" and the "how" of the experiences that the cases had with the phenomenon were written with verbatim examples. Finally, a composite description of the "essence" of their preferences for each CEAP theme was written in the interpretations (Creswell, 2013).

4. Results and Discussion

4.1. Results for the First Research Question

A two-way ANOVA was conducted to compare all groups' means on the RC pretest before the treatments. Initially, the normality assumption was checked using skewness and kurtosis, and their ratios over the standard errors. The normality assumption was retained because the ratios were lower than 1.96 (Field, 2018). Moreover, Levene's test result showed that the group variances were homogeneous ($p > .05$). Table 1 exhibits the two-way ANOVA results for the pretest. As shown in Table 1, there was not any significant difference between the groups' means on the pretest of RC, $F(1, 96) = .04, p > .05$, partial $\eta^2 = .001$. Thus, it was concluded that they were homogeneous in terms of their RC before the treatments.

Table 1
Tests of Between-Subjects Effects for the Pretest

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial η^2
Group	.36	1	.36	.040	.84	.001
Fields	.16	1	.16	.018	.89	.001
group * Fields	.04	1	.04	.004	.94	.001
Error	855.68	96	8.91			
Total	24082.00	100				

Moreover, Table 1 shows that the computer and architect groups' pretest means were not statistically different, $F(1, 96) = .018, p > .05$, partial $\eta^2 = .001$. Hence, it was concluded that the groups were homogeneous in terms of their RC before the treatment. Finally, there was not any significant interaction between treatment types and fields of study, $F(1, 96) = .004, p > .05$, partial $\eta^2 = .001$. A two-way ANOVA was conducted to answer the first research question. Table 2 displays the descriptive statistics for all four groups' RC posttest.

Table 2
Descriptive Statistics for the Posttest; Group v. Fields of Study

Group	Fields of Study	M	SE	95% Confidence Interval	
				Lower Bound	Upper Bound
Experimental	Computer	22.56	.58	21.41	23.71
	Architecture	21.52	.58	20.37	22.67
Control	Computer	18.32	.58	17.17	19.47
	Architecture	18.52	.58	17.37	19.67

As displayed in Table 2, the experimental computer ($M = 22.56, SE = .58$), and architecture ($M = 21.52, SE = .58$) had larger means on the posttest than the control computer ($M = 18.32, SE = .58$), and architecture ($M = 18.52, SE = .58$). Moreover, it should be noted that Levene's test results revealed that the group variances were homogeneous ($p > .05$).

Table 3
Tests of Between-Subjects Effects for the Posttest of RC

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Squared	Eta
Group	327.61	1	327.61	39.01	.000	.28	
Fields	4.41	1	4.41	.52	.47	.00	
group * Fields	9.61	1	9.61	1.15	.28	.01	
Error	806.08	96	8.39				
Total	42073.00	100					

The results in Table 3 indicate that the experimental groups significantly outperformed the control groups on the posttest with large effect size, $F(1, 96) = 39.01, p < .05$, partial $\eta^2 = .28$. Moreover, there was not any significant interaction between treatment types and fields of study, $F(1, 96) = 1.14, p > .05$, partial $\eta^2 = .01$. The two-way ANOVA results were followed by simple effect analysis (Table 4).

Table 4
Simple Effect Analysis for the RC Posttest

Field of Study	(I) Group	(J) group	Mean Difference (I-J)	SE	Sig	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
Computer	Experimental	Control	4.24*	.82	.000	2.61	5.86
Architecture	Experimental	Control	3.00*	.82	.000	1.37	4.62

* $p < .05$.

Based on the results shown in Table 4, it can be concluded that the experimental computer group ($M = 22.56$) significantly outdid the control computer group ($M = 18.32$) on the RC posttest ($MD = 4.24$, $p < .05$). Moreover, the experimental architecture students ($M = 21.52$) significantly did better than the control architecture students ($M = 18.52$) on the RC posttest ($MD = 3.00$, $p < .05$). Since both comparisons were significant, the null-hypothesis was rejected.

4.2. Results for the Second Research Question

4.2.1. Interview Question 1. Did Your Teacher Make an Effort to Address Your Needs in the EAP classroom?

In response to the first interview question, six traditional EAP students conveyed that their needs were not considered by their teacher in their classrooms. They expressed dissatisfaction with their teacher's lack of engagement in consultations regarding course objectives, activities, and assignments. Furthermore, the educational goals, activities, and assignments were predetermined by the teacher. On the other hand, three students stated that they did not articulate their needs and demands in the classroom. They were unaware of their needs and preferences, and their teacher did not provide any explanations. To show that the results are based the evidence in the data (Levitt et al., 2018), two excerpts from the interview transcripts are extracted as follows:

Interviewee 1

During the initial session, we communicated our needs to the teacher, but unfortunately, we were informed that there was not sufficient time to accommodate our requirements. Instead, we were instructed to solely focus on the content requirements of the course.

Interviewee 2

Our opportunities to express our desires, interests, and needs were non-existent as our teacher strictly adhered to a predetermined curriculum in the classroom. The sole concentration of our teacher in the classroom was on the predetermined syllabus. Our engagement was limited to

completing the assignments from the book, even if they seemed unreasonable.

The results of qualitative data analysis indicate that Iranian EAP teachers do not engage in consultation with students regarding the educational objectives, activities, and assignments of the course. Moreover, the EAP teachers adhered to a predetermined curriculum in the traditional EAP classes, not considering the individual needs of the students. These practices in Iranian EAP classes deviate significantly from the principles of critical EAP. In other words, the learning needs are determined by the teachers or their departments arbitrarily, which may disappoint or frustrate the students in the classroom situations (Atai & Tahririan, 2003; Jordan, 2002). As a result, since they neither rely on learner needs nor encourage the students to query and form the instruction they receive, the students may not perform well in their courses (Benesch, 2013).

4.2.2. Interview Question 2. Did Your Teacher Make an Effort to Address Your Rights in the EAP Classroom? In Other Words, Did Your Teacher Consult With You About the Methods of Content Courses and the Forms of Assessment in the EAP Classroom?

Regarding the second interview question, nine students indicated that their teacher did not make any effort to acknowledge their rights within the EAP classroom. Additionally, they expressed that their teacher did not seek their input or consultation regarding the teaching methods used for content courses and the types of assessments employed. The following are two excerpts from the interviews:

Interviewee 3

Our teacher did not allow us to participate in shaping the content of the course or ask questions about assessments. He consistently emphasized that our sole focus should be on the learning of the predetermined course content in the classroom.

Interviewee 4

Our teacher did not consider our rights in the EAP classroom. She expected us to comply with predetermined conditions. As a result, I often arrived late to class or engaged in conversations with my classmates while the teacher was instructing because I found the class uninteresting.

The results show that the traditional EAP teachers do not consider students' rights in the traditional EAP classroom as they follow pre-established methods of content courses and goals in the EAP classes. Hence, when EAP students' rights are not considered in the traditional EAP classes, they show

their resistance in different ways, such as arriving late or not paying attention to the lesson (Benesch, 2013). Overall, it was found that the traditional EAP teachers did not consider students' rights in their classes, and their priority was to meet departmental requirements instead of learners' right to question and think critically, which is completely against the theoretical underpinnings of learner engagement (Benesch, 2013).

4.2.3. Interview Question 3. Did You Interact With Your Teacher in the EAP Classroom?

In response to the third interview question, seven students stated that they had no interaction with their EAP teacher during classroom sessions. Conversely, only three students mentioned that their teacher facilitated opportunities for interaction. To illustrate, two excerpts include:

Interviewee 5

Our teacher spared us any opportunities to engage in classroom interactions. Instead, she devoted the entirety of the class period to reading a series of texts and responding to the associated exercises given in the pre-determined coursebook by the syllabus.

Interviewee 6

Our opportunities to engage in interactions and discussions with both our teacher and classmates in the classroom were limited. This was primarily due to our teacher's emphasis on prioritizing the development of the reading skill. As a result, our teacher primarily concentrated on a series of text-based activities that aimed to enhance specific academic skills, such as reading. This approach placed less emphasis on fostering direct interactions between the learners and the teacher.

In general, the results of the interview analysis mostly indicate a lack of interaction between the traditional EAP teachers and students, which favors the monologic knowledge transfer in the EAP classes and ignores students' expectations and dissatisfactions. This contradicts the principles of hope, interactivity, and dialog in the EAP classroom because the classroom is devoid of hope and dialogue (Freire, 2020) and students are not allowed to get their voice heard (Benesch, 2013).

4.2.4. Interview Question 4. Did Your Teacher ask for Your Suggestions When Choosing the Textbook or Topic for the EAP Class?

In response to the fourth interview question, nine interviewees confirmed that their teacher did not seek their suggestions while selecting the textbooks or topics. The following are two excerpts from the interviews:

Interviewee 7

The instructor did not seek our input when it came to selecting the topic for our EAP class. As students, we are expected to adhere to the predetermined syllabus and activities set by the instructor, solely aiming to meet the expectations of the target community.

Interviewee 9

Definitely not. During the initial session, our teacher solely introduced a book without seeking our opinions or suggestions regarding the topics to be covered throughout the term. Then, he elaborated on the syllabus to be covered in the classroom during the term.

The interview analyses indicate that the traditional EAP teachers did not seek students' suggestions when it came to selecting the textbook or topics. This finding reveals that Jakonen and Duran's (2024) argument for implementing a learner-centered approach in EAP decision-making does not come true in these classes because they typically adhere to predetermined syllabi, which contradict the principles of learner-centered decision-making. Hence, it is found that the traditional EAP syllabus is influenced by traditional needs analysis, ensuring alignment with academic requirements at the cost of neglecting genuine academic experiences (Morgan, 2009).

4.2.5. Interview Question 5. Were You Regarded as Passive or Active Participants in the EAP Classroom Environment?

In response to the fifth interview question, eight students expressed their dissatisfaction with their teacher's performance in the classroom. They also mentioned that they felt like passive knowledge recipients with no opportunities for negotiation in the classroom environment. For example, two excerpts are as follows:

Interviewee 8

During the EAP classroom sessions, our instructor predominantly engaged in one-way communication, with students assuming passive roles as mere listeners. There was limited opportunity for students to actively participate or negotiate the requirements for activities and assignments.

Interviewee 10

I felt dissatisfied with my teacher's performance as she primarily focused on reading texts aloud and translating them into Persian without engaging in other interactive teaching methods. Furthermore, she even provided the answers to the exercises herself, allowing little opportunity for student involvement or participation.

The results reveal that traditional EAP teachers neglect the students' real-life situations and solely prioritize the transfer of knowledge. This finding aligns with Johns' (2012) assertion that students in traditional EAP classes are portrayed as passive individuals who are compelled to abandon their language and cognitive patterns to conform to the demands of the target community. This can also prove Benesch's (2013) claim that traditional EAP teachers perceive students as passive individuals without the ability to actively influence their learning needs and preferences. Overall, it is found that traditional EAP teachers do not practice the fundamental principle of CEAP, which aims to empower students by enabling them to express their opposition, actively engage in democratic participation as valued members of the academic community, and contribute meaningfully to society as a whole (Benesch, 2013).

4.3. Discussion

This research primarily intended to check the effects of the traditional EAP and critical EAP pedagogies on Iranian university ESP students' RC. It was revealed that the participants in both experimental CEAP classes (i.e., architecture and computer sciences) outperformed their counterparts in the control groups on the RC posttests. This finding can be justified on the ground that the former bridged the gap between what was studied in the EAP classroom and the outside world, which helps students and instructors to change the monologic nature of traditional EAP programs (Li, 2020). In other words, the CEAP provided opportunities for students to explain their external demands and communicate their responses in the classroom (Benesch, 2001).

In line with Atai and Tahririan (2003), Hayati (2008), Soodmand Afshar and Movassagh (2016) and Tavakoli and Tavakol (2018), the result of this study revealed that the traditional EAP is not sufficient for improving Iranian university students' RC. It may be justified on the ground that the study skills constitute the key module in the traditional EAP syllabus (Jordan, 2002), and the instructors follow a pre-determined curriculum, which does not allow them to consult their students on the course agenda, activities and assignments, and learner's needs and rights (Benesch, 2001; Jakonen & Duran, 2024).

An additional justification for this finding may be that traditional EAP teachers do not work on critical reading and critical thinking skills (Khany & Tarlani-Aliabadi, 2016; Wilson, 2016). As Benesch (2013) put it, critical thinking provides opportunities for learners to express their opinions, views, and ideas through applying the previous information. Another explanation probably for the same finding is that the traditional EAP and the content of ESP textbooks in Iran are tedious in the classroom (Hayati, 2008) since EAP teachers aim to prepare their students for university assignments rather than letting them participate in co-constructing the course syllabus. According to

Benesch (2013), when students select their topics and themes, they can concentrate more intently on them. Finally, the traditional EAP pedagogy may not have been as effective as the CEAP pedagogy because the language learning needs are not taken into consideration in view of subjective needs analysis, and teachers and students are not allowed to negotiate and choose topics due to top-down policies (Derakhshan et al., 2023; Soodmand Afshar & Movassagh, 2016). However, this finding is against Wingate and Tribble (2012), who criticized the absence of pedagogy in CEAP as it possibly disseminates ideology (Deane & O'Neill, 2011) and diverts genuine academic literacy (Wingate, 2015).

Moreover, the subsidiary finding of the quantitative phase was that the field of study does not affect the causality of the treatment. As a result, regardless of the discipline, both experimental groups similarly benefited from the treatment because the CEAP pedagogy proved to work the same in the two different discipline-specific contexts, rejecting any probable need to make discipline-specific decisions as to the methodology of the different ESP courses. This finding supports Hutchinson and Waters' (1987) definition of ESP, which asserts that all choices as to methods and materials center around the learners' justifications for learning, and Clapham's (2001) call for the provision of materials by the students irrespective of the specificity of their ESP courses.

However, in the absence of any empirical findings, it contradicts the following theoretical works in the literature. In the first place, it is in contrast to Robinson's (1991) view that discipline-specific pedagogy is one of the three realisms (i.e., language, pedagogy, and students' specific interest) upon which ESP enterprise draws. Similarly, this finding is against Dudley-Evans and St. John's (1998) assertion that "all ESP teaching should reflect the methodology of the disciplines and professions it serves" (p.4).

The results for the second question (i.e., To what extent do the traditional EAP students' preferences for the traditional EAP align with the CEAP principles?) suggest that the traditional EAP students recognize the benefits of critical programs in supporting their academic progress and development; however, the developers and practitioners of these courses in Iran are indifferent to the learner-centeredness principle; therefore, they do not foster the students' awareness of the socio-cultural and political dimensions of language use in academic contexts (Kiany & Khayyamdar, 2005). This finding is supported by Behboudi et al. (2022), who proposed that criticality should be a component of ESP teaching methods and the students' voices should be heard in the selection of the content.

5. Conclusion and Implications

This study was designed to investigate the effects of traditional EAP and CEAP on Iranian university students' RC. On the basis of the first finding, it can be concluded that CEAP is more influential in improving Iranian ESP university students' RC than traditional EAP. The conclusion that may be drawn from the second finding is that CEAP is not discipline-specific in terms of methodology and may apply to a range of academic settings. The outcomes of the present study may be beneficial for ESP students and practitioners. The former can take advantage of CEAP in their classrooms by participating in the choice of topics, tasks, and textbooks. The ESP teachers should also choose the textbooks, activities, and ESP sources based on their students' interests and academic needs to gradually shift to CP in Iranian universities. Furthermore, the material developers should prepare CEAP-based resources to set the stage for the transformation of the ESP pedagogy.

Additionally, the findings from the second question led to the conclusion that EAP students held a negative view regarding the traditional EAP pedagogy. To put it differently, the EAP students exhibited a strong inclination towards actively participating in CP in EAP programs. This implies that students acknowledge the significance and advantages of such programs in bolstering their academic advancement and growth.

Finally, this study suffered from several shortcomings that limit the generalizability of the findings. First, only 100 EAP students were chosen from the departments of computer sciences and architecture in two Iranian universities, which may not meet the representativeness criterion and not be generalizable to the whole ESP population. Researchers could repeat the study in subsequent investigations by using a larger sample size. Future researchers can also use different samples of ESP students with varying critical thinking abilities. Moreover, the present study could be replicated to examine the probable effect of gender on the effect of the CEAP pedagogy. Furthermore, although this study focused on the fields of computer sciences and architecture, the same method can be used with other fields of study to achieve a more comprehensive picture of the CEAP pedagogy.

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References

- American Psychological Association. (2020). *Publication manual of the American psychological association 2020: The official guide to APA style* (7th ed.). American Psychological Association. <https://doi.org/10.1037/0000165-000>
- Anthony, L. (2018). *Introducing English for specific purposes*. Routledge.
- Arnó-Macià, E., Aguilar-Pérez, M., & Tatzl, D. (2020). Engineering students' perceptions of the role of ESP courses in internationalized universities. *English for Specific Purposes*, 58, 58-74. <https://doi.org/10.1016/j.esp.2019.12.001>.
- Atai, M. R., Babaii, E., & Nili-Ahmadabadi, M. (2018). A critical appraisal of university EAP programs in Iran: Revisiting the status of EAP textbooks and instruction. *Journal of Language Horizons*, 2(1), 31–52. <https://doi.org/10.22051/lghor.2018.19961.1077>
- Atai, M. R., & Nazari, O. (2011). Exploring reading comprehension needs of Iranian EAP students of health information management (HIM): A triangulated approach. *System*, 39(1), 30–43. <https://doi.org/10.1016/j.system.2011.01.015>
- Atai, M. R., & Tahririan, M. H. (2003). *Assessment of the status of ESP in the current Iranian higher educational system* [Conference presentation]. LSP: Communication, Culture and Knowledge Conference, University of Surrey, Surrey, England.
- Ayat, M., Farahi, A., & Yosefkhani, N. (2014). *English for the students of computer*. Payame Noor University Press.
- Beeston, S. (2000). The UCLES EFL item banking system. *Research Notes*, 2, 8-9.
- Behboudi, S., Nazaribagha, K., & Farsani, M. A. (2022). Developing a pluralistic curriculum model for ESP in Iran. *Journal of Language and Translation*, 12(4), 197-208. <https://doi.org/10.30495/jntell.2023.1980499.1048>
- Belcher, D. (2009). *English for specific purposes in theory and practice*. University of Michigan Press.
- Benesch, S. (2001). *Critical English for academic purposes: Theory, politics and practice*. Routledge.
- Benesch, S. (2009). Theorizing and practicing critical English for academic purposes. *Journal of English for Academic Purposes*, 8(2), 81-85. <https://doi.org/10.1016/j.jeap.2008.09.002>
- Benesch, S. (2013). *Considering emotions in critical English language teaching: Theories and praxis*. Routledge.
- Bingham, C., & Biesta, G. (2010). *Jacques Rancière: Education, truth, emancipation*. Bloomsbury.
- Bronner, S. E. (2017). *Critical theory: A very short introduction* (Vol. 263).

- Oxford University Press.
- Broukal, M. (1997). *Peterson's TOEFL reading flash: The quick way to build reading power*. Peterson's.
- Bruce, I. (2021, March). Towards an EAP without borders: Developing knowledge, practitioners, and communities. *International Journal of English for Academic Purposes: Research and Practice*, 23–36.
- Clapham, C. (2001). Discipline specificity and EAP. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 84-100). Cambridge University Press. <https://doi.org/10.1017/cbo9781139524766.009>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage.
- Darder, A. (2018). *The student guide to Freire's pedagogy of the oppressed*. Bloomsbury.
- Davidson, F., & Fulcher, G. (2020). *Language testing and assessment: An advanced resource book*. Routledge.
- Deane, M., & O'Neill, P. (2011). Writing in the disciplines: Beyond remediality. In M. Deane & P. O'Neill (Eds.), *Writing in the discipline* (pp. 28–36). Palgrave
- Derakhshan, A., Karimpour, S., & Nazari, M. (2023). Most of us are not feeling well: Exploring Iranian EAP practitioners' emotions and identities. *Ibérica*, 45, 317–344. <https://doi.org/10.17398/2340-2784.45.317>
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Dudley-Evans, T., & St John, M. (1998). *Developments in ESP: A multi-disciplinary approach*. Cambridge University Press.
- Farahady, H. (2005). *English for the students of architecture*. SAMT.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage.
- Freire, P. (2020). Pedagogy of the oppressed. In P. Kupperts & G. Robertson (Eds.), *The community performance reader* (1st ed., pp. 24–27). Routledge.
- Geranpayeh, A. (2003). A quick review of the English quick placement test. *Research Notes*, 12, 8-11.
- Haghani, M. (2005). *Special English for the students of computer*. SAMT.
- Hashemi, M. R., & Babaii, E. (2013). Mixed methods research: Toward new research designs in applied linguistics. *Modern Language Journal*, 97(4), 828–852. <https://doi.org/10.1111/j.1540-4781.2013.12049.x>
- Hayati, A. M. (2008). Teaching English for special purposes in Iran: Problems and suggestions. *Arts and Humanities in Higher Education*, 7(2), 149–164. <https://doi.org/10.1177/1474022208088645>

- Helmer, K. A. (2013). Critical English for academic purposes: Building on learner, teacher, and program strengths. *Journal of English for Academic Purposes*, 12(4), 273–287. <https://doi.org/10.1016/j.jeap.2013.08.003>
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge University Press.
- Hyland, K. (2012). *Disciplinary identities: Individuality and community in academic discourse*. Cambridge University Press.
- Jakonen, T., & Duran, D. (2024). Learner-centered EAP practices: Managing agenda in tutorial interaction. *Journal of English for Academic Purposes*. Advance online publication. <https://doi.org/10.1016/j.jeap.2024.101345>
- Johns, A. M. (2012). The history of English for specific purposes research. In B. Paltridge & S. Starfield (Eds.), *The handbook of English for specific purposes* (pp. 5-30). Wiley. <https://doi.org/10.1002/9781118339855.ch1>
- Jones, N. (2000). Background to the validation of the ALTE Can-do project and the revised Common European Framework. *Research Notes*, 2, 11-13.
- Jordan, R. R. (2002). The growth of EAP in Britain. *Journal of English for Academic Purposes*, 1, 69–78. [https://doi.org/10.1016/s1475-1585\(02\)00004-8](https://doi.org/10.1016/s1475-1585(02)00004-8)
- Karimi, M., & Ghorbanchian, E. (2022). Effects of adjunct model of instruction on EAP learners' reading comprehension skill. *Theory and Practice of Second Language Acquisition*, 8(2), 1–19. <https://doi.org/10.31261/tapsla.10432>
- Kavenuke, P. S., & Muthanna, A. (2021). Teacher educators' perceptions and challenges of using critical pedagogy: A case study of higher teacher education in Tanzania. *Journal of University Teaching & Learning Practice*, 18(4). <https://doi.org/10.53761/1.18.4.10>
- Khany, R., & Tarlani-Aliabadi, H. (2016). Studying power relations in an academic setting: Teachers' and students' perceptions of EAP classes in Iran. *Journal of English for Academic Purposes*, 21, 72–85. <https://doi.org/10.1016/j.jeap.2015.12.002>
- Kiany, G. R., & Khayyamdar, M. (Eds.). (2005). *Proceedings of the first national ESP/EAP conference*. SAMT.
- Levitt, H.M., Bamberg, M.G., Creswell, J.W., Frost, D.M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA publications and communications board task force report. *The American psychologist*, 73(1), 26-46. <http://dx.doi.org/10.1037/amp0000151>

- Li, Y. (2020). *Educational change amongst English language college teachers in China*. Springer.
- MacDonald, J. (2016). The margins as third space: EAP teacher professionalism in Canadian universities. *TESL Canada Journal*, 34(1), 106–116. <https://doi.org/10.18806/tesl.v34i1.1258>
- Macallister, C. J. (2016). Critical perspectives. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes* (pp. 283–294). Routledge
- Marr, J. W. (2021). The promise and precarity of critical pedagogy in English for academic purposes. *BC TEAL Journal*, 6(1), 132–141.
- Martiarini, E. (2018). Reading for academic purposes: Problems faced by undergraduate students of visual communication design. *Journal of English Language Education and Literature*, 3(1), 16–26.
- Meadows, L.M. & Morse, J.M. (2001). Constructing evidence within the qualitative project. In J.M. Morse, J.M. Swanson & A. J. Kuzel (Eds.), *The nature of qualitative evidence* (pp. 188-201). Sage.
- Morgan, B. (2009). Fostering transformative practitioners for critical EAP: Possibilities and challenges. *Journal of English for Academic Purposes*, 8(2), 86–99. <https://doi.org/10.1016/j.jeap.2008.09.001>
- Mortenson, L. (2022). Integrating social justice-oriented content into English for Academic Purposes (EAP) instruction: A case study. *English for Specific Purposes*, 65, 1–14. <https://doi.org/10.1016/j.esp.2021.08.002>
- Movahhedi, T., Sarkeshikian, A., & Golshan, M. (2023). Iranian EAP teachers and students' perceptions of critical English for academic purposes. *Journal of Modern Research in English Language Studies*, 11(1), 77-100. <https://doi.org/10.30479/jmrels.2023.18332.2193>
- Oxford University Press. (2001). *The Quick Oxford placement test*. Oxford University Press.
- Prior, S. M., Fenwick, K. D., Saunders, K. S., Ouellette, R., O'Quinn, C., & Harvey, S. (2011). Comprehension after oral and silent reading: Does grade level matter? *Literacy Research and Instruction*, 50(3), 183–194. <https://doi.org/10.1080/19388071.2010.497202>
- Rastegar-poor, H. (2003). *English for the students of architecture*. SAMT.
- Robinson, P. C. (1991). *ESP today: A practitioner's guide*. Prentice Hall.
- Shahidipour, V., & Tahririan, M. H. (2017). Evaluation of newly developed EAP textbooks for the students of medicine published by SAMT. *Journal of Modern Research in English Language Studies*, 4(4), 47-65. <https://doi.org/10.30479/elt.2017.1455>
- Sharndama, E. C., Samaila, Y., & Tsojon, Y. I. (2014). English for academic purpose: A tool for enhancing students' proficiency in English language skills. *International Journal of English Language Teaching*,

- I(2)*, 14–20.
- Sharpe, P. J. (2010). *TOEFL iBT: Internet-based text*. Barron's.
- Soodmand Afshar, H., & Movassagh, H. (2016). EAP education in Iran: Where does the problem lie? Where are we heading? *Journal of English for Academic Purposes*, 22, 132-151. <https://doi.org/10.1016/j.jeap.2016.04.002>
- Soodmand Afshar, H., & Movassagh, H. (2021). Towards a critical language teacher identity: Contributions of a critical teacher education course. *Applied Research on English Language*, 10(2), 89-110. doi: 10.22108/are.2021.127277.1682
- Tavakoli, M., & Tavakol, M. (2018). Problematizing EAP education in Iran: A critical ethnographic study of educational, political, and sociocultural roots. *Journal of English for Academic Purposes*, 31, 28–43. <https://doi.org/10.1016/j.jeap.2017.12.007>
- Widdowson, H.G. (1983). *Learning purpose and language use*. Oxford University Press.
- Wilson, K. (2016). Critical reading, critical thinking: Delicate scaffolding in English for academic purposes (EAP). *Thinking Skills and Creativity*, 22, 256–265. <https://doi.org/10.1016/j.tsc.2016.10.002>
- Wingate, U. (2015). *Academic literacy and student diversity: The case for inclusive practice*. Multilingual Matters
- Wingate, U., & Tribble, C. (2012). The best of both worlds? Towards an English for Academic Purposes/academic literacies writing pedagogy. *Studies in Higher Education*, 37(4), 481–495. <https://doi.org/10.1080/03075079.2010.525630>