# SUGGESTED SYLLABUS CONTENT FOR COMPUTER ASSISTED LANGUAGE LEARNING COURSE IN ENGLISH LANGUAGE TEACHING PROGRAMS

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**ABSTRACT**

Computer-Assisted Language Learning has emerged as an indispensable part of foreign language teaching methodology nowadays because of the rise of the implementation of online teaching. Considering this, educating teacher trainees regarding CALL and its integration into language classrooms is of great importance. Thus, this study aimed to put forward topics for a sample CALL syllabus to be used in ELT departments. In the study, a mixed-method sequential exploratory research design was adopted. Initially, a thematic analysis of qualitative data, which consisted of 19 articles, 17 books, 15 university syllabi, and six Google documents, was carried out to come up with a list of possible CALL-related topics. Then, quantitative data were collected through a 24-item questionnaire that was administered to 146 ELT students. The most preferred CALL course topics in the documents analyzed were mainly related to the theoretical groundings of CALL and their historical developments (e.g., CALL approaches (behavioral, cognitive, socio-cognitive), Computer-mediated communication (CMC) in language learning & teaching, and History of CALL). On the other hand, the participant pre-service teachers were chiefly concerned with CALL teacher education, technological-pedagogical content knowledge, the role of teachers and learners in CALL, teaching language skills using CALL, feedback in CALL, and types of CALL applications & activities. These results showed that pre-service teachers preferred practical knowledge that they could use in their future teaching experiences, over theory-based knowledge. The conclusions, along with implications for practice and suggestions for future research, were also discussed at the end of the study.

**Keywords:** Computer assisted language learning, English language teaching, syllabus, elective course

# İNGİLİZCE ÖĞRETMENLİĞİ PROGRAMLARINDAKİ BİLGİSAYAR DESTEKLİ DİL ÖĞRENİMİ DERSİ İÇİN ÖNERİLEN MÜFREDAT İÇERİĞİ

**ÖZ**

Günümüzde, çevrim içi öğretim uygulamalarının kullanım alanlarının artmasıyla Bilgisayar Destekli Dil Öğretimi (BDDÖ) yabancı dil öğretiminin vazgeçilmez bir parçası olmuştur. Dolayısıyla, BDDÖ konusunda öğretmen adaylarının eğitimi ve bu teknolojinin dil sınıflarına entegrasyonu önem arz etmektedir. Bu nedenle, bu çalışma İngilizce Öğretmenliği bölümünde kullanılabilecek BDDÖ dersi müfredatı için örnek oluşturacak ders konularını belirlemeyi amaçlamaktadır. Bu çalışmanın araştırma deseni Keşfedici Sıralı Karma yöntemdir. Bu araştırma deseninde önce nitel veri 19 makale, 17 kitap ve 15 üniversite müfredatı ve 6 Google belgesi incelenmesi ile toplanmıştır. Bu analiz sonunda konuların bir listesi oluşmuş ve bu konular tematik olarak analiz edilmiştir. İkinci aşamada nicel veri, oluşan 24 maddelik anketin 146 İngilizce öğretmeni adayına uygulanmasıyla elde edilmiştir. İngilizce öğretmenliği programlarından ve ilgili alanyazından elde edilen veriler

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doğrultusunda en çok tercih edilen konular BDDÖ teorik temelleri ve tarihsel gelişimi ile ilgili konular olmuştur [BDDÖ Yaklaşımları (davranışçı, bilişsel, sosyo-bilişsel) dil öğrenimi ve öğretiminde bilgisayar aracılı iletişim ve BDDÖ tarihi)]. Öte yandan, çalışmaya katılan öğretmen adayları tarafından en çok tercih edilenler, BDDÖ öğretmen eğitimi teknolojik-pedagojik içerik bilgisi, BDDÖ'de öğretmenlerin ve öğrencilerin rolü, BDDÖ kullanarak dil becerilerinin öğretimi, BDDÖ'nde dönüt verme, BDDÖ uygulama ve etkinlik türleridir. Bu sonuçlar, öğretmen adaylarının teori temelli bilgileri değil, aksine gelecekteki öğretmenlik deneyimlerinde kullanabilecekleri pratik bilgileri tercih ettiğini göstermektedir. Ortaya çıkan sonuçlar ve bu sonuçlara bağlı olarak verilebilecek öneriler çalışmanın son bölümünde tartışılmaktadır.

**Anahtar Kelimeler:** Bilgisayar destekli dil öğretimi, İngiliz dili eğitimi, müfredat, seçmeli ders

## INTRODUCTION

Computer-Assisted Language Learning (CALL) has become a prominent concern in the field of English Language teaching and learning, as "children are learning Internet skills just as they learn basic reading and writing" (Lewis, 2004, p.7), and so today's learners are regarded as "native speakers of the digital language of computers, video games, and the Internet" (Prensky, 2001, p.1). Thanks to the Information and Communications Technology (ICT), furthermore, students can acquire a great deal of authentic materials conveniently which present comprehensible input in diversified ways, and so addressing the needs of language learners with distinct types of interest, proficiency levels, learning styles, and intelligences (Kastuhandani, 2014; Lewis, 2004). Language instructors can also design learner-centred and socio-culturally supported learning environments for their students' using computers, mobile devices, and the internet (Christianson, Tiene, & Luft, 2002). To achieve this, on the other hand, they need to develop necessary abilities or adapt their existing instructional skills to this new realm of language learning and teaching. Supporting this view, Prensky (2001) noted "today's teachers have to learn to communicate in the language and style of their students" (p.4). Jones (2001) also purported that only if language practitioners build the knowledge and skills to integrate technology into their educational methods and practices, they can promote students to become autonomous learners. For these reasons, CALL courses have been incorporated into language teacher education programs worldwide. Some ELT programs in Turkish universities also offer CALL as a content knowledge elective course, which is also found to be the mostly preferred course by pre-service and in-service teachers (Şenol, 2020). On the other hand, there is not an agreed-upon syllabus content on this subject. It is crucial, therefore, that a specific syllabus for CALL elective course be constituted through empirical research methods and a collective understanding of what universities previously and currently offering this course suggest, the literature on CALL and ICT integration in language learning, along with concerning the needs of pre-service EFL teachers.

## LITERATURE REVIEW
### Theoretical Background
Since this current study aims to suggest sample syllabus content for the Computer Assisted Language Learning elective course, some key concepts and definitions that are essential have been put forward in this section. Even though the terms curriculum and syllabus tend to be confused with each other by teachers sometimes, there have been many definitions of these terms which put forward the distinction between them. Richards (2001) defines the term curriculum as being broad and goes on to list the issues that language curriculum development focuses on as "the content of the program, learners' needs, contextual factors, teaching aims, and objectives, planning the syllabus, good teaching, instruction materials and measurement of the curriculum" (p.1). As it can be inferred from this list that details language curriculum development, the syllabus can be considered as a part of the curriculum development. Similarly, Marsh and Willis (2003) state that a syllabus focuses on the content of a specific course with its aims and objectives in mind. In other words, the syllabus deals with one course, determines the instruction, aims, and objectives. Nunan (1988) claims that syllabus design is interested in the "what" of a program and continues to say that syllabus is more localized and about what actually takes place in the classroom. To sum up, looking at these definitions related to curriculum and syllabus, one can notice the relationship and the distinction between them at the same time. That is, curriculum refers to a wider set of issues related to the teaching context and students while syllabus is interested in the content and the layout of a specific course, listing its aims and objectives.

The other essential term that should be described in this section is Computer Assisted Language Learning. The place of computers and technology has become quite solid in our lives in the last year as a result of the pandemic, but the term "CALL" is actually not recent. One of the earliest definitions of CALL that can be found in literature belongs to Levy (1997), more than 20 years ago from now. Levy (1997, p.1) states that CALL can be explained as "the search for and study of applications of the computer in language teaching and learning." Beatty (2010) adds to this definition stating that CALL can be described as the instances in which students make use of computers to improve their language skills. Ever since CALL was first defined and discussed, there have been a lot of technological developments that influenced the language teaching pedagogy. It would not be realistic to think that what CALL entailed ten years ago is still the same. Throughout its existence, CALL has gone through some phases such as behaviouristic, communicative, and integrative (Lee, 2000; Yang, 2010). Looking at these phases, it can be concluded that CALL is influenced as a result of the popular pedagogies, yet it also affects the language teaching pedagogy.

The popularity of CALL derives from the many advantages that it presents to the language teaching area. The benefits of using CALL can be listed as "experiential learning, motivation, enhanced student achievement, authentic materials for study, greater interaction, individualization, having different sources of information, and global understanding" (Lee, 2000, p.2-3), and accessibility in all circumstances (Asiri, et al., 2021). Implementing CALL requires the implementation of many aspects such as designing materials, making use of appropriate technologies, having a command of pedagogical theories and modes of instruction (Beatty, 2010), flipped learning (İlter, 2020), e-learning and blended learning (Ozkan & Koseler, 2009). Taking these factors into consideration, it is essential to have a clear and up-to-date syllabus that will give the pre-service teachers the chance to study CALL. Compton (2009) states that most of the teacher education programs tend to focus on software and hardware issues instead of pedagogy while teaching CALL. Considering the rising popularity of online education, Compton (2009) also states that CALL teacher education should be improved to be able to have teachers who are competent enough to teach online classes in the future. Considering these factors and the influence of technology, which is evolving every single day, bringing new trends and approaches in English language teaching due to new research (Beatty, 2010), designing a CALL syllabus that reflects this change is worthwhile in terms of the possible pedagogical implications for foreign language teacher education.

**Related Studies on Syllabus Design in ELT Programs**

Many studies have been conducted to suggest a syllabus for policymakers, teachers, or curriculum designers. The aim of these studies is mostly to support the needs and interests of the learners, keep up with the current trends in the system, and provide a fresh perspective for both learners and instructors.

To begin with, Yanç (2002) conducted a study to suggest an advanced reading course syllabus for the first-year students in ELT departments. Questionnaires were implemented by both instructors and students to gather data and as a result, a syllabus consisting of ten units in line with the needs and interests of the instructors and students was suggested. In another master thesis, Saraç (2003) suggested a syllabus for the teaching of 'Poetry' course in ELT departments because Poetry: Analysis and Teaching was included as a compulsory course for ELT departments newly when this study was conducted so there was a need for a syllabus to guide. In the lights of the data gathered from questionnaires, final version of syllabus for 'Poetry' course in ELT departments was suggested. Gündüz (2005) conducted a study to suggest a syllabus for the course 'Introduction to British Literature I' because there was a mismatch between the name of the course and its definition in the CoHE's curriculum. As a result of this study, the description of the course was renewed and a syllabus with goals and objectives accompanied by a six-unit coursebook with course materials was suggested. In another study conducted by Altay (2010), two questionnaires were implemented to sophomores and instructors at a state university, and in the lights of the findings, a content syllabus for advanced writing skills at/in the ELT department was suggested. In her doctoral dissertation, Akman Yeşilel (2012) suggested a syllabus for the "Effective Communication Skills" at ELT departments. This study aimed to provide required knowledge about concepts and theories related to

communication for pre-service language teachers and train them to implement the concepts and theories to the classroom. The results indicated that the suggested syllabus for the "Effective Communication Skills" at ELT departments supported pre-service language teachers' communication skills.

Tarakçıoğlu and Tunçaslan (2014) conducted an experimental study to define the effects of the short story-based syllabus on vocabulary teaching to very young learners. After seven weeks of implementation to the experimental group, they found out that there was a significant difference between the two groups in favour of the experimental group. In other words, the experimental group performed better than the control group in terms of learning the vocabulary items in English language. One of the suggested syllabi in the related literature was "Creative drama course" in ELT by Horasan Doğan and Cephe (2018), in this study they investigated the effects of creative drama on eight teaching skills and perceptions of pre-service EFL teachers that participated in a 30-hour creative drama workshop at a state university. After observing the participants during the sessions, they concluded that pre-service EFL teachers' teaching skills developed but especially, some skills such as body language, affective atmosphere, and spontaneous decision-making improved better than other skills. Participants had positive attitudes towards using drama in teaching, designing of drama sessions, and video-recorded teaching so based on these findings a syllabus was suggested.

Şenol (2020) in her master thesis aimed to define EFL teachers' opinions on content knowledge electives. Correlated with the EFL teachers' opinions and preferences, a syllabus for the course was suggested. Findings of this study indicated that the professional needs of the participants were the main factor that affected their choices. Among content knowledge electives, the most preferred one was "Current Trends on ELT", the main reason for this choice was explained as teachers' needs of keeping in touch with the recent changes in the field. A two-phase study was conducted by Akbay and Cesur (2019) to define the most preferred General Knowledge elective courses among English language teachers and in the light of the findings they suggested a syllabus for the Diction course. A study carried out by Cesur and Balaban (2020) aimed to define pre-service language teachers' perspectives on the content of the course "World Englishes and Culture". Content analysis and teacher trainers' preferences indicated that among the topics of the World Englishes and Culture course, the effect of culture on language teaching was the most preferred one. Thus, a syllabus for this course was suggested at the end of the study along with the most preferred topics. Another study belongs to Cesur and Bulanık (2020), and that study investigated the most important topics for Teaching English to Young Learners, which were "using visuals, games, and songs", "developing children's speaking skills", and "defining young learners and their characteristics".

Although these research studies have been conducted on suggested syllabi for various ELT courses, there has been no attempt to develop either a suggested syllabus or a list of topics for CALL as an elective course. Thus, the present study aimed to suggest comprehensive syllabus content for the CALL elective course for ELT programs in Turkey using mixed-methods sequential exploratory design to collect relevant data from related documents and the opinions of pre-service teachers. Accordingly, the following research questions led the study:
1. What are the most preferred CALL course topics by ELT programs worldwide and related literature?
2. What are the most preferred CALL course topics by the pre-service EFL teachers in Turkey?

## METHODOLOGY
### Research Design
The present study adopted a mixed method sequential exploratory research design (Berman, 2017; Ivankova, Creswell, & Stick, 2006). Therefore, both qualitative and quantitative data collection analysis procedures were performed. First, a document analysis of academic books, journal articles, university syllabi, and web documents on CALL was conducted to collect qualitative data. The data were analysed through thematic analysis (Meyer & Avery, 2009) on Microsoft Excel software to reveal possible CALL elective course topics. Then, the most frequent topics on the CALL content

were transformed into a quantitative questionnaire on a 5-point Likert scale to be administered to pre-service EFL teachers at Çanakkale Onsekiz Mart University to receive their ideas on the most important CALL elective course topics. Finally, the questionnaire responses of the pre-service EFL teachers were analysed by running descriptive statistics on SPSS 24 to calculate mean scores and frequencies for each item. Figure 1 summarizes all the stages and procedures of the study.

**Figure 1.** Mixed Methods Sequential Exploratory Research Procedures (Adapted from Berman, 2017, p.6; Ivankova et al., 2006, p.16)

| Phase | Procedures | Products |
|---|---|---|
| Qualitative Data Collection | Document Analysis <br> • University syllabi <br> • Articles <br> • Books <br> • Google documents | Syllabus content |
| Qualitative Data Analysis | Thematic Analysis <br> • Analysis of the documents on CALL | Content Topics <br> Frequency Tables |
| Connecting Qualitative and Quantitative Phases | Expert Opinion | Chart of reduced and finalized topics to use as a quantitative data collection instrument |
| QUANTITATIVE Data Collection | Questionnaire – online administration | Nominal (Categorical) item scores |
| QUANTITATIVE Data Analysis | SPSS Descriptive Analysis | Questionnaire data results; frequencies and mean scores |
| Integration of the Quantitative and Qualitative Results | Interpretation and explanation of QUAL & QUAN results | Discussions of implications <br> Suggestions for further research |

**Participants and Context**

The participants of the study were a total of 146 pre-service EFL teachers from different grade levels at Çanakkale Onsekiz Mart University in Turkey. Because of the COVID-19 situation, the data was collected through online administration of a questionnaire developed by the researchers via *Google Forms.* Table 2 presents the gender and the level of the participants.

**Table 1.** Gender and level distribution of participants

|  | 1st year | 2nd year | 3rd year | 4th year | Total |
|---|---|---|---|---|---|
| **Female** | 6 | 12 | 61 | 15 | 94 |
| **Male** | 2 | 5 | 32 | 13 | 52 |
| **Total** | 8 | 17 | 93 | 28 | 146 |

**Data Collection Instruments and Data Analysis**

As the study embraced a mixed-method sequential exploratory research design (Berman, 2017; Ivankova et al., 2006), first a comprehensive document analysis including 19 journal articles, 17 academic books, 15 CALL course syllabi from Turkish and foreign universities, and 6 web documents from Google search was conducted to reveal possible topics for the CALL elective course syllabus. The qualitative data were entered into Microsoft Excel for determining the themes related to different topics on CALL (Meyer & Avery, 2009). Moreover, three of the researchers analysed the data separately, and each analysis was compared and discussed to reach intercoder agreement. Next, the qualitative data including the CALL content was further analysed for frequencies of the topics. As a result, 24 CALL-related topics were determined. Then the topics were listed as items to form a quantitative questionnaire on a 5-point Likert scale (from 1; not at all important to 5; extremely important). Expert opinion was also received from an ELT professor to maintain content and face validity of the instrument. The finalized version of the questionnaire can be seen in Appendix A.

Receiving the required permissions and ethical approval report from the ethical committee of Çanakkale Onsekiz Mart University to conduct the study, the questionnaire was administered to the participants online via *Google Forms* to ask them for ordering the topics in terms of importance. Following the data collection procedure, the responses on the questionnaire were entered into *SPSS 24,* and descriptive statistics was conducted to find out frequencies and means scores for each item. To interpret the results from the 5-point Likert scale, finally, the mean scores were standardized based on the formula (highest score – lowest score / number of options; 5 -1 / 5 = 0,80) (Semerci & Aydın, 2018). According to the interval score (0,80), the mean scores between 1,00 and 1,80 were graded as 'not at all important', 1,81 – 2,60 as 'somewhat important', 2,61 to 3,40 as 'important', 3,41 to 4,20 as 'very important', and 4,21 to 5,00 as 'extremely important'.

**RESULTS**

**Results of Research Question 1**

The first research question of this study aims to investigate the most preferred CALL course topics by ELT programs worldwide and related literature. The content analysis encompassed 19 Journal Articles (coded as "A"), 17 Academic Books (coded as "B"), 6 Documents from Google Search (coded as "G"), 15 University Syllabi from Turkey, and Foreign Universities (coded as "U") (See Appendix B for the codes with their corresponding sources).

The results of the content analysis were presented in Table 2. According to this analysis, topics related to the CALL course were listed based on their frequencies.

**Table 2.** Results obtained from content analysis

| | Topic | f | % | Source (Codes) |
|---|---|---|---|---|
| **1** | CALL approaches (behavioural, cognitive, socio cognitive) | 26 | 46 | A1, A3, A4, A7, A8, A10, A11, A12, A13, A15, A16, A19, B2, B3, B5, B15, B16, B17, G2, G5, G6, U1, U3, U6, U8, U12 |
| **2** | Computer mediated communication (CMC) in language learning & teaching | 23 | 40 | A2, A3, A4, A6, A10, A15, A16, A19, B2, B3, B6, B8, B11, B13, G1, G2, U2, U4, U5, U8, U11, U12, U15 |
| **3** | History of CALL | 20 | 35 | A1, A3, A5, A6, A7, A11, B1, B3, B4, B10, B13, B14, B7, G2, G3, G4, G5, U1, U11, U13 |
| **4** | Design & development of CALL materials & applications | 18 | 32 | A2, A5, A7, A8, B1, B3, B7, B9, B10, B11, G2, G5, U2, U5, U7, U10, U12, U14 |
| **5** | Types of CALL applications & activities | 15 | 26 | A3, A4, A7, A11, A17, B3, B6, B8, B9, B11, B14, B17, G6, U4, U7 |

| 6 | Teaching language skills using CALL | 12 | 21 | A6, A9, A10, A12, A13, A16, A17, G4, U5, U12, U13, U14 |
|---|---|---|---|---|
| 7 | Introduction to CALL | 10 | 18 | A3, A11, A19, G2, G4, G5, U5, U8, U11, U12 |
| 8 | Evaluation & adaptation of CALL materials & applications | 9 | 16 | A2, A5, A8, U3, U6, U9, U10, U11, U12 |
| 9 | Advantages and barriers of using CALL | 8 | 14 | A1, A6, A18 , G1, G2, G3, G4, G6 |
| 10 | Online assessment | 8 | 14 | B6, B8, B12, B14, B17, G2, G3, U4 |
| 11 | Use of wikis /blogs in language teaching and learning | 6 | 11 | A3, G2, U1, U4, U5, U14 |
| 12 | Mobile learning | 6 | 11 | A16, B2, B14, U1, U5, U14 |
| 13 | Teaching language areas using CALL | 6 | 11 | A3, A9, A19, U7, U13, U14 |
| 14 | Research into CALL | 5 | 9 | U6, U8, U12, U13, U14 |
| 15 | Use of social media in language teaching and learning | 5 | 9 | A1, G6, U1, U2, U5 |
| 16 | Professional development resources: electronic journals, listservs, conferences, etc. | 4 | 7 | G5, U4, U10, U12, |
| 17 | Feedback in CALL | 4 | 7 | A7, B1, B6, B7 |
| 18 | Word operating and editing (word processor) | 3 | 5 | A11, A12, A17 |
| 19 | Learning styles of the digital generation and digital citizenship | 3 | 5 | B2, U4, U12 |
| 20 | Online & Flipped classes | 3 | 5 | U1, U4, G5 |
| 21 | Ethical issues | 3 | 5 | B3, B15, G2 |
| 22 | CALL Teacher education | 3 | 5 | A14, B17, G5 |
| 23 | Role of teachers and learners in CALL | 3 | 5 | G4, G5, U8 |
| 24 | Technological-pedagogical content knowledge | 3 | 5 | A1, A15, G5 |

*\*Code 'A': Research Articles; Code 'B': Books; Code 'G': Documents from Google search; Code 'U': University syllabi.*

As seen in Table 2, almost half of the documents analysed have CALL approaches with the highest frequency (46%). Computer-mediated communication in language learning and teaching has the second-highest frequency (40%). Furthermore, according to the content analysis History of CALL is the other topic that has the third-highest frequency (35%). The fourth topic is "Design and development of CALL materials and applications" which has high frequency (32%) among the contents. Moreover, another topic that has high frequency (26%) is types of CALL applications & activities. The findings also indicate that Teaching language skills using CALL with the frequency of 21% is among the topics that have high frequency among the contents. Introduction to CALL with a frequency of 10 (18%) and evaluation and adaptation of CALL materials and applications with the frequency of 9 (16%) are other contents that have high frequency based on the content analysis. Advantages and barriers of using CALL and Online assessment have the same frequency (14%). Moreover, mobile learning and teaching language areas using CALL have the same frequencies (11%) Findings also indicated that Research into CALL and Use of social media in language teaching and learning are two contents that are mostly based on the university syllabi have the same frequency. Professional development resources and feedback in CALL have the same frequency as well (7%). The topics which have less frequency among the documents analysed are Word operating and editing (word processor), Learning styles of the digital generation and digital citizenship, Online & Flipped classes, Ethical issues, CALL Teacher education, Role of teachers and learners in CALL, and Technological-pedagogical content knowledge (5%).

**Results of Research Question 2**

The aim of the second research question of the study is to investigate the most preferred CALL course topics by the pre-service EFL teachers in Turkey. Thus, the results obtained from the questionnaire based on the content analysis are presented below.

**Table 3.** Pre-service teachers order of significance among 24 topics (*N*=146)

| Topics | 1 | 2 | 3 | 4 | 5 | M |
|---|---|---|---|---|---|---|
| 22. CALL Teacher education | 1 | 11 | 19 | 45 | 70 | 4,18 |
| 24. Technological-pedagogical content knowledge | 1 | 7 | 28 | 44 | 66 | 4,14 |
| 23. Role of teachers and learners in CALL | 2 | 9 | 24 | 44 | 67 | 4,13 |
| 6. Teaching language skills using CALL | 1 | 11 | 29 | 33 | 72 | 4,12 |
| 17. Feedback in CALL | 1 | 12 | 34 | 40 | 59 | 3,99 |
| 5. Types of CALL applications & activities | 1 | 14 | 23 | 57 | 51 | 3,98 |
| 13. Teaching language areas using CALL | 2 | 12 | 31 | 48 | 53 | 3,95 |
| 4. Design & development of CALL materials & applications | 3 | 9 | 40 | 49 | 45 | 3,85 |
| 19. Learning styles of the digital generation and digital citizenship | 3 | 15 | 36 | 41 | 51 | 3,84 |
| 8. Evaluation & adaptation of CALL materials & applications | 1 | 16 | 34 | 55 | 40 | 3,80 |
| 2. Computer-mediated communication (CMC) in language learning & teaching | 1 | 9 | 48 | 51 | 37 | 3,78 |
| 20. Online & Flipped classes | 3 | 19 | 39 | 37 | 48 | 3,74 |
| 21. Ethical issues | 9 | 17 | 28 | 41 | 51 | 3,74 |
| 1. CALL approaches (behavioural, cognitive, socio cognitive) | 1 | 22 | 32 | 51 | 40 | 3,73 |
| 12. Mobile learning | 4 | 17 | 47 | 29 | 49 | 3,70 |
| 16. Professional development resources: electronic journals, listservs, conferences, etc. | 3 | 14 | 47 | 44 | 38 | 3,68 |
| 9. Advantages and barriers of using CALL | 2 | 16 | 44 | 51 | 33 | 3,66 |
| 15. Use of social media in language teaching and learning | 5 | 19 | 40 | 45 | 37 | 3,62 |
| 10. Online assessment | 3 | 23 | 40 | 44 | 36 | 3,60 |
| 11. Use of wikis /blogs in language teaching and learning | 4 | 27 | 37 | 39 | 39 | 3,56 |
| 18. Word operating and editing (word processor) | 2 | 23 | 47 | 44 | 30 | 3,53 |
| 7. Introduction to CALL | 7 | 30 | 46 | 34 | 29 | 3,33 |
| 14. Research into CALL | 1 | 28 | 45 | 36 | 27 | 3,29 |
| 3. History of CALL | 2 | 51 | 42 | 17 | 8 | 2,49 |

Pre-service EFL teachers were requested to rate the topics in terms of their importance from 1 to 5 (Not at all important-Extremely important).

Results indicate that the most preferred topic for CALL Course is CALL teacher education (*M*=4,18). The second most preferred topic is technological-pedagogical content knowledge with 4,14 mean score. The third most preferred topic among the participants is the Role of teachers and learners in CALL with 4,13 mean score. Moreover, teaching language skills using CALL (*M*=4,12) is the fourth most selected topic. Feedback in CALL with 3,99 mean score is the fifth topic for CALL Course. On the other hand, Introduction to CALL (*M*=3,33), Research into CALL (*M*=3,29), and History of CALL (*M*=2,49) are the least preferred topics by the participants.

**DISCUSSION**

As a result of the document analyses, the most preferred CALL course topics by ELT programs worldwide and the related literature are mainly related to theoretical groundings of CALL and their historical developments (e.g., CALL approaches (behavioural, cognitive, socio cognitive), Computer

mediated communication (CMC) in language learning & teaching, and History of CALL). On the other hand, the questionnaire study indicated that the pre-service teachers participating in this study were chiefly concerned with such topics - CALL Teacher education, Technological-pedagogical content knowledge, Role of teachers and learners in CALL, Teaching language skills using CALL, Feedback in CALL, Types of CALL applications & activities – that manifested their perceived prioritized needs related to how to teach aspects of CALL. This difference between the academics and pre-service EFL teachers' perceptions of priority of CALL topics may shed light onto the crucial importance of the consideration of the effects of contextual dynamics on designing and developing effective and efficient course syllabi in higher education settings. Rather than taking a top-down approach to such educational decision-making processes, empowering the local stakeholders and involving their opinions may be of great value. Another implication from this finding could be that while developing courses, it would be better not only to receive the perceived needs or priorities of students, but also to conduct thorough needs analysis studies by gathering information from a multitude of stakeholders including administrators, instructors, learners, and other related parties (Dudley - Evans & St. John, 1998).

Furthermore, the prioritized CALL syllabus content topics by the pre-service EFL teachers are in convergence with the literature. Regarding CALL Teacher Education, for example, El Shaban and Egbert (2018) put forward some suggestions for teacher educators in designing and implementing professional CALL development. Concerning technological pedagogical content knowledge, Lee (2000) asserts that lack of English Language teachers' technical and theoretical knowledge in CALL is among the most prominent barriers in delivering effective courses using ICT technology, which underscores the importance of the need suggested by the participants. Chai et al. (2011) also noted, based on previous literature, that technological pedagogical content knowledge is an important construct when pre-service teachers aim to integrate ICT in their teaching practices. In relation to the role of teachers and learners, Prensky (2001) claimed "today's teachers have to learn to communicate in the language and style of their students" (p.4), which indicates that language learners' preferences and expectations has changed due to the developments in technology in their lives, and so language practitioners need to be endowed with necessary skills to be able to cater for their needs. This argument is also supported by Jones (2001). Moreover, Hani's (2014) survey among 200 English Language teachers in Jordan showed that the ease in integrating language skills – a suggested way to teach four language skills in the SLA literature, is one of the advantages of the using CALL. The participant pre-service teachers' selection of this topic highlights their awareness and needs in benefitting from this advantage. Regarding Feedback in CALL, Ware and Kessler (2013) underlines the prominence of digital feedback along with modes (face to face, delivered electronically by human, and generated by computer) focus (error correction, developing ideas, building genre awareness) and strategies (instructor-directed, peer, and autonomous) for giving effective feedback to learners in CALL environments. Types of CALL applications and activities have also received much attention of scholars. For instance, Yang (2010) mentions a wide variety of beneficial software along with activities for teaching and learning languages from contextualized grammar and vocabulary drill programs with audio and graphics to error checking software and to e-testing applications. The writer goes on to suggest that such various types of tools should be known and selectively utilized by language practitioners for effective teaching based on learner needs rather than relying on a limited set of materials, which is also in line with the preferences of the participant ELT students in this study. Last but not least, these points along with the sources discussed can be utilized to fulfil the needs stressed by the participants.

Table 3 also revealed that most of the CALL syllabus content topics in the questionnaire were rated as 'very important' (items *22, 24, 23, 6, 17, 5, 13, 4, 19, 8, 2, 20, 21, 1, 12, 16, 9, 15, 10, 11, 18*; $M = 3,41 – 4,20$) or 'important' (items *7 & 14*; $M = 2,61 – 3,40$), while only item *3* being rated as 'somewhat important' ($M = 1,81 – 2,60$). None of the items presented were considered as 'not at all important' ($M = 1,00 – 1,80$). This may indicate that the participants believed integrating technology and the Internet in language learning and teaching practices is of considerable benefit and they, as future teachers, need to learn the necessary skills and knowledge for this to happen in their teaching situations. In line with their view, it is likely that both teachers and learners of second and foreign

languages make good use of the Internet and communications technology in traditional classroom and distance education contexts (Ozkan & Koseler, 2009). Furthermore, several studies yielded evidence that such technology integration support language learners in improving their four macro skills (listening, speaking, reading, and writing) (e.g., Gu, 2002; Kung & Chuo, 2002; Lin, 2003), and enhance their development of grammatical and lexical competence, intercultural knowledge, and active involvement in classroom tasks (Hoecherl-Alden, 2000; Osuna & Meskill, 1998).

## CONCLUSION & SUGGESTIONS

The current study aimed to investigate the most preferred CALL course topics by ELT programs worldwide and related literature, and those by the pre-service EFL teachers in Çanakkale Onsekiz Mart University in Turkey through a mixed method sequential exploratory research design.

In conclusion, the findings of the study added to existing evidence that L2 teachers may use CALL techniques and procedures to improve the learning conditions of their pupils, and so second language teacher education programs should present CALL courses to their students to endow them with the required competencies in utilizing computational technology and the Internet. To do so, however, teacher educators need to engage in critical decision–making processes. In other words, they need to make informed decisions about what topics to involve in the contents of their syllabus by considering the needs and expectations of their students along with the demands of their existing and target contexts.

Despite using both quantitative and qualitative methods like document analysis and questionnaire, this study also has several limitations. First, the data was only selected from the pre-service teachers. Second, further information could be gathered using other introspective methods like one-on-one or focus group interviews. Third, the findings of the study cannot be generalized to all ELT settings in Turkey or other countries since it was conducted in a specific context, the ELT Department of Çanakkale Onsekiz Mart University. To obtain more generalizable conclusions, future studies may collect a broader cross-sectional set of data from various ELT departments, though it is suggested that such a decision be context bounded. It should be also carefully considered that the present study only aimed at offering a list of topics for the content of the CALL elective course. Suggesting a complete syllabus is thus beyond the scope of this study, as it requires not only the topics but also other crucial decisions like organizing the topics according to their priority order regarding their necessity for learning the others, methodological decisions concerning how to teach the content and so what activities or tasks in and out of the classroom will be presented, time allocated to each topic and activity, and assessment and evaluation of student learning both for formative and summative decisions.

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## Uzun Öz

Günlük hayatın her alanında teknoloji kullanımının artması ve pandemi süreci ile uzaktan eğitim yöntemlerinin eğitim öğretim uygulamalarındaki yerinin ve etkisinin giderek kuvvetlenmesi, günümüzde eğitimde teknoloji kullanımını bir seçenek değil zorunluluk hâline getirmeye başlamıştır. Dolayısıyla, teknoloji ve teknolojik araçların kullanımının eğitimdeki yeri de önem kazanmıştır. İngilizce öğretimi alanı her zaman teknolojik gelişmelerden en çok etkilenen alanlardan biri olmuştur. "Bilgisayar Destekli Dil Öğretimi" teknoloji kullanımının dil öğretimindeki yerini vurgulayan ve sınıfta bilgisayar teknolojileri kullanımını içeren yaklaşımlardan birisidir ve geçmişten günümüze yabancı dil öğretimi pedagojisine yadsınamaz katkıları olmuştur. Teknolojinin, bilgisayar kullanımının ve bilgisayar destekli dil öğretiminin gerekliliğinin artması ile İngilizce öğretmen adaylarının da bu konularda ve özellikle de bu konuların eğitim öğretim programlarına dâhil edilmesi hususunda eğitim almasının önemi ve gerekliliği her geçen gün artmaktadır. Bu ihtiyaçları ve gereklilikleri göz önünde bulundurarak bu çalışmanın amaçları ve araştırma soruları ortaya koyulmuştur. İlk olarak, bu çalışma dünya genelindeki İngilizce Öğretmenliği programlarında bilgisayar destekli dil öğretimi konusunda verilen derslerde ele alınan konuları ve ayrıca bu alanda ortaya koyulmuş makale ve kitap gibi kaynaklarda bilgisayar destekli dil öğretimi ile ilgili en sık bahsedilen konuları bulmak istemektedir. Bu çalışmanın bir diğer amacı da Türkiye'de İngilizce Öğretmenliği bölümlerinde eğitim alan öğrencilerin bilgisayar destekli dil öğretimi alanında en çok tercih ettikleri ve öğrenmeye ilgi duydukları konuları ortaya çıkarmaktır. Son olarak, bu çalışma İngilizce Öğretmenliği bölümlerinde eğitim gören öğretmen adaylarının bölümlerinde alabilecekleri, amacı ve hedefleri bilgisayar destekli dil öğretimi yaklaşımını öğretmen adaylarına benimsetmek ve gelecekteki öğretmenlik deneyimlerinde ve dil öğretme uygulamalarında etkili bir şekilde kullanabilmelerini sağlamak olan bir seçmeli ders için örnek bir içeriğin oluşturulmasını hedeflemektedir. Bu içerik oluşturulurken katılımcıların en fazla seçtiği ve öğrenmek istediği konular kullanılacaktır. Bu çalışmanın verisi hem nicel hem de nitel yöntemler kullanılarak toplanmıştır. Veri toplamak için keşfedici sıralı karma yöntemler araştırması desenlemesi kullanılmıştır. Veri toplama sürecinin başında ilk olarak, bilgisayar destekli dil öğretimi alanında en sık görülen ve en önemli konuları ortaya çıkarabilmek adına bir tematik içerik analizi yapılmıştır. Bu içerik analizini yapabilmek için 19 makale, 17 kitap, 6 web sayfası ve de hem Türk hem de çeşitli yabancı üniversitelerden bilgisayar destekli dil öğretimini ele alan 15 farklı ders içeriği incelenmiştir. Bu içerik analizi sonucunda kaynaklarda ve müfredatlarda en sık karşılaşılan 24 farklı konu ortaya çıkarılmış, sıklıklarına göre listelenmiş ve bu konuları kullanarak bir anket oluşturulmuştur. Anket Çanakkale Onsekiz Mart Üniversitesinde İngiliz Dili Eğitimi bölümünde eğitim görmekte olan 146 öğretmen adayına uygulanmıştır. Uygulanan bu anketin amacı, çalışmaya katılan öğrencilerin en önemli gördükleri ve en çok ihtiyaç duydukları konuları seçmelerini sağlayıp, çıkan sonuçlara göre bir örnek ders içeriği ortaya koymaktır. Katılımcılardan anketteki maddeleri önemli bulma derecelerine göre 1, 2, 3, 4 ya da 5 şeklinde numaralandırmaları istenmiştir. 1 "önemsiz", 2 "az önemli", 3 "ortalama önemli", 4 "çok önemli" ve 5 "kesinlikle önemli" anlamına gelmektedir. COVID-19 pandemisi nedeniyle devam eden uzaktan eğitim süreci göz önünde bulundurularak anket Google Forms uygulaması üzerinden oluşturulmuş ve katılımcılardan veri çevrim içi olarak toplanmıştır. Veri toplama süreci tamamlandıktan sonra katılımcılardan gelen yanıtlar SPSS 24 programına aktarılmış ve betimsel istatistik yöntemleri kullanılarak verilen yanıtların sıklık analizleri ve ortalamaları hesaplanmıştır. Anketi katılımcılara uygulamadan önce gerçekleştirilen içerik analizine göre, dünyada uygulanan bilgisayar destekli dil öğretimi ders programlarında ve bu konuda ortaya koyulmuş kaynaklarda en sık görünen konular genelde bilgisayar destekli dil öğretiminin teorik temelleri, bilgisayar destekli dil öğretiminin tarihsel gelişimi (bilgisayar destekli dil öğretimine yaklaşımlar: davranışçı, bilişsel) ve dil öğretiminde bilgisayar aracılı iletişim gibi konular olmuştur. Ancak, bu çalışmadaki katılımcılardan toplanan veri sonucunda bunlardan farklı konular ortaya çıkmıştır. Çalışmaya katılan İngilizce Öğretmenliği öğrencilerinin en fazla sıklıkla seçtiği konular bilgisayar destekli dil öğretimi alanında öğretmen eğitimi, teknolojik pedagojik içerik bilgisi çerçevesi, bilgisayar destekli dil öğretiminde öğretmen ve öğrenci rolleri, bilgisayar destekli dil öğretimi kullanarak İngilizce dil becerilerinin öğretilmesi, bilgisayar destekli dil öğretiminde dönüt verme, bilgisayar destekli dil öğretimi uygulamaları ve aktiviteleri olarak sıralanabilir. Bununla birlikte, bilgisayar destekli dil öğretimine giriş, bilgisayar destekli dil öğretiminde araştırma ve bilgisayar destekli dil öğretiminin tarihi gibi konuların çalışmanın katılımcıları tarafından en az tercih edilen

konular olduğu ortaya çıkmıştır. Son olarak, uygulanan ankette sunulan konulardan hiçbiri katılımcılar tarafından "önemsiz" olarak işaretlenmemiştir. Katılımcıların verilen hiçbir konuyu önemsiz olarak işaretlememesi teknoloji ve teknoloji kullanımını dil öğretme ve öğrenme sürecine dâhil etmenin ne kadar önemli olduğunu düşündüklerinin açık bir göstergesidir. Çalışmadaki katılımcılara uygulanan bu anketten çıkan sonuçlar, İngilizce öğretmenliği öğrencilerinin teori temelli bilgileri değil, aksine gelecekteki öğretmenlik deneyimlerinde kullanabilecekleri pratik bilgileri tercih ettiğini göstermektedir. Bu sonuçlar da İngilizce Öğretmenliği bölümlerinde eğitim alan öğretmen adaylarının eğitim öğretim uygulamalarında kullanmak için bilgisayar ve teknoloji konusunda eğitilmesi gerekliliğini ortaya koymaktadır. Çalışmanın sonucunda ortaya çıkan sonuçlar ve bu sonuçlara bağlı olarak verilebilecek öneriler çalışmanın son bölümünde detaylı bir şekilde tartışılmaktadır.

## APPENDICES
### Appendix A
Dear Students,

We are writing you to get your opinions on a syllabus for the elective course 'for Computer-Assisted Language Learning (CALL) Course. In the first phase of our study, after document and thematic analysis, the items of the questionnaire were obtained. Therefore, in the second phase, we strive for designing a syllabus by collecting data from pre-service teachers at English language teaching department at Çanakkale Onsekiz Mart University. In this sense, I would like to invite you to complete the questionnaire below.

The data collected in this research study will be kept confidential.

Thanks in advance for sharing your extensive knowledge and support.


**A.      Personal Information**

Firstly, we would like to get your permission to participate into the study. Could you please confirm that you have attended the research related to a suggested syllabus for the course of discourse analysis and language teaching voluntarily? Please, confirm the statement below.

I confirm that I would like to participate into the study voluntarily. (___)
   1.  Your Gender : Female / Male
   2.  Your Age: _____
   3.   Have you ever given a course related to instructional technology or CALL? Yes/No


**B.      Please rate the topics of Computer Assisted Language Learning (CALL) Course according to their importance in ELT.**

Could you please evaluate the following topics according to their importance in ELT (not important=0, of little importance=1, of average importance=2, very important=3, absolutely essential=4)?

| No | Topics for the course of Computer Assisted Language Learning (CALL) | 1 | 2 | 3 | 4 | 5 |
|----|--------------------------------------------------------------------|---|---|---|---|---|
| 1 | CALL approaches (behavioural, cognitive, socio cognitive) | | | | | |
| 2 | Computer mediated communication (CMC) in language learning & teaching | | | | | |
| 3 | History of CALL | | | | | |
| 4 | Design & development of CALL materials & applications | | | | | |
| 5 | Types of CALL applications & activities | | | | | |
| 6 | Teaching language skills using CALL | | | | | |
| 7 | Introduction to CALL | | | | | |
| 8 | Evaluation & adaptation of CALL materials & applications | | | | | |
| 9 | Advantages and barriers of using CALL | | | | | |
| 10 | Online assessment | | | | | |
| 11 | Use of wikis /blogs in language teaching and learning | | | | | |
| 12 | Mobile learning | | | | | |

| 13 | Teaching language areas using CALL | | | | | |
|----|-----------------------------------|--|--|--|--|--|
| 14 | Research into CALL | | | | | |
| 15 | Use of social media in language teaching and learning | | | | | |
| 16 | Professional development resources: electronic journals, listservs, conferences, etc. | | | | | |
| 17 | Feedback in CALL | | | | | |
| 18 | Word operating and editing (word processor) | | | | | |
| 19 | Learning styles of the digital generation and digital citizenship | | | | | |
| 20 | Online & Flipped classes | | | | | |
| 21 | Ethical issues | | | | | |
| 22 | CALL Teacher education | | | | | |
| 23 | Role of teachers and learners in CALL | | | | | |
| 24 | Technological-pedagogical content knowledge | | | | | |

## Appendix B

*Codes for the sources of Qualitative Data*

| B1 | Contemporary computer-assisted language learning. |
|----|---------------------------------------------------|
| B2 | WorldCALL: Sustainability and Computer-Assisted Language Learning |
| B3 | Teaching & researching: Computer-assisted language learning. Routledge. |
| B4 | Brave new digital classroom: Technology and foreign language learning. |
| B5 | A Practical Guide to Using Computers in Language Teaching |
| B6 | The Handbook of Technology and Second Language Teaching and Learning |
| B7 | New Perspectives on CALL for Second Language Classrooms |
| B8 | Changing Language Education through CALL |
| B9 | Computer-Assisted Language Learning: Learners, Teachers and Tools |
| B10 | Computer-Assisted Language Learning: Context and Conceptualization |
| B11 | CALL Dimensions: Options and Issues in Computer-Assisted Language Learning |
| B12 | Computer Applications in Second Language Acquisition |
| B13 | Technology in Language Learning: An Overview |
| B14 | CALLing All Foreign Language Teachers: Computer-assisted Language Learning |
| B15 | A practical guide to using computers in language teaching |
| B16 | Tips for teaching with CALL: Practical approaches to CALL |
| B17 | CALL Essentials Principles and Practice in CALL Classrooms |
| U1 | Abant İzzet Baysal University Computer Assisted Language Teaching I |
| U2 | Abant İzzet Baysal University Computer Assisted Language Teaching II |
| U3 | Boğaziçi University Technology-Enhanced Language Teaching |
| U4 | Anadolu University E-skills for Language Teachers |
| U5 | Hacettepe University Instructional Technology & Materials |
| U6 | METU Introduction to Computer Assisted Language Learning Tools |
| U7 | International Cyprus University Material Design in Language Teaching |
| U8 | Victoria University of Wellington CALL |
| U9 | Newcastle University Technology Enhanced Language Learning (TELL) |
| U10 | Murray State University CALL |
| U11 | Simon Frazer University CALL |
| U12 | Stanford University Foundations of Computer-Assisted Language Learning |
| U13 | The University of Jordan CALL |
| U14 | The University of Auckland CALL |
| G1 | http://englishagenda.britishcouncil.org/seminars/beyond-computer-assisted-language-learning |
| G2 | https://units.imamu.edu.sa/colleges/LanguageAndTranslation/ba/Documents/call.pdf |

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| G3 | https://www.fluentu.com/blog/educator/what-is-computer-assisted-language-learning/ |
| G4 | https://elt.fandom.com/wiki/Computer_assisted_language_learning |
| G5 | https://www.llas.ac.uk/resources/gpg/61 |
| G6 | www2.nkfust.edu.tw/~emchen/CALL/unit1.htm |
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