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Examining the attitudes of students' towards using computer assisted language learning in foreign language classrooms

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Abstract. *Problem statement.* The use of technology determines the level of development of a country. The issue of technology adaptation in the field of education is important to secure technological integration. Due to the success in providing equality of opportunity to the entire population, the use of communication technology in the field of education is becoming more and more widespread in this context. In recent years, the significance of technological integration in the sphere of education has become apparent. A great number of research conducted on the views of students towards integrating computer assisted language learning (CALL) into the language learning classrooms, however, few studies addressing the attitudes of students towards using CALL in the Kazakhstani contexts exist in the field of language teaching. The aim of this study was to examine university level students' attitudes towards the use of computer assisted language learning in Kazakhstan. *Methodology.* The quantitative method of research by analyzing the data collected through survey with the help of SPSS Statistics 23.0, as well as questionnaire developed by M. Vandewaetere and P. Desmet to measure attitudes of students towards the use of computer assisted language learning were applied. The participants of the study were 126 EFL pre-service teachers enrolled at Foreign Languages Teaching Department of Khoja Akhmet Yassawi International Kazakh-Turkish University. *Results.* The participants have overall positive attitudes towards using CALL in the language classroom. The difference between participants' attitudes towards using CALL according to their age of study at the university was revealed. It was found statistically significant differences between first year and second year students and first year and third year students' views towards using CALL in language learning. *Conclusion.* Further research studies might be conducted in the form of mixed design in order to get more detailed information to support or understand the general results found with the help of questionnaire.

Keywords: communicative competence, intercultural competence, assessment tools, language learners, document analysis, qualitative research

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Исследование отношения студентов к использованию компьютерных технологий в обучении иностранному языку

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Аннотация. *Постановка проблемы.* Использование технологий определяет уровень развития страны. Вопрос адаптации технологий в сфере образования для обеспечения технологической интеграции является первостепенным. Успех в предоставлении равных возможностей всему населению способствует все более широкому распространению использования коммуникационных технологий в сфере образования. Значимость технологической интеграции в сфере образования в последние годы стала очевидной. Проведено большое количество исследований для выявления взглядов студентов на интеграцию компьютерного обучения (CALL) в процесс изучения языков, однако исследований, посвященных отношению студентов к использованию CALL в Казахстане, мало. Цель настоящего исследования – изучить отношение студентов высших учебных заведений Казахстана к использованию компьютерного обучения языку. *Методология.* Применялся количественный метод анализа данных, собранных в ходе опроса с помощью программы SPSS Statistics 23.0, а также анкета, разработанная М. Вандеавет и П. Десмет для измерения отношения учащихся к использованию компьютерного обучения языку. В анкетировании приняли участие 126 будущих учителей иностранного языка, обучающихся на кафедре иностранных языков Международного казахско-турецкого университета имени Ходжи Ахмета Ясави. *Результаты.* Установлено, что участники в целом положительно относятся к использованию CALL в процессе обучения иностранному языку. Наблюдается разница в отношении участников к использованию CALL в зависимости от срока их обучения в университете. Выявлены статистически значимые различия между студентами первого и второго курсов и студентами первого и третьего курсов в отношении использования CALL в изучении языка. *Заключение.* С целью поддержки и более глубокого понимания общих результатов, полученных с помощью анкеты, дальнейшее изучение вопроса может быть проведено в форме смешанного дизайна.

Ключевые слова: коммуникативная компетенция, межкультурная компетенция, инструменты оценивания, изучающие языки, анализ документов, количественное исследование

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Problem statement. Information and communications technology (ICT) appears from the combination of two main concepts Information Technologies and communication technologies. The former is defined as accessing, storing, organizing and using information in a digital environment, whereas the latter, is considered as all the hardware and technologies used in the transmission of information [1].

Since its inception in the 1950s, technology in language learning has evolved steadily, partly as a result of efforts to keep up with the rapid advances in computer technology. The development of technology in language learning led to the development of different teaching theories and pedagogical conceptions. Therefore, various theoretical perspectives necessitate different approaches to understanding and defining this concept [2].

The most common version used in the field of language learning is CALL. Some scholars consider it as a technique that uses technology in the field of education to learn a language [3], whereas the others see it as one of the learning and teaching methods [4].

Today advancements in ICT technology have an impact on more than just our daily lives; they have also sparked the creation of brand-new tools and methodologies in teaching. According to Levy, technology that engages all learning senses should play a significant role in education [5]. Kessler and Hubbard also provided general benefits of Computer Assisted Instruction in language teaching claiming that with the help of CALL “students can learn by seeing, hearing and applying information provided through information technologies which present information as audio, visual and text-based” [6, p. 175].

While reviewing related literature on the integration of CALL, it can be found a great numbers of studies conducted in foreign language learning and teaching field. Important aspects of integrating technology into English language learning field such as web-assisted language learning discussed in studies conducted by Uzunboylu [7], mobile-assisted language learning [8], implementation of virtual reality (VR) into language learning [9], as well as teachers and students attitudes towards the use of CALL in the language learning process in different contexts.

As Patton stated, since the educational institutions have started a significant effort to install the technological devices for the classroom usages to improve language learning the researchers should focus their attention on the role of the technology in the learning and teaching environment to critically evaluate the applica-

tion of CALL in the language classrooms [10]. This view is supported by Olibie who claims that “CALL is becoming an instructive instrument so as to progress learning process by aiding students to gain a better understanding of the learning concept” [11, p. 68].

A sufficient number of researches have been conducted to investigate how students in different settings feel about the use of computer-assisted language learning (CALL) in classrooms. However, relatively little research has been done to explore the attitudes of Kazakhstani ELT pre-service teachers (who are still students but almost future teachers of English) towards using CALL in the foreign language learning environment. To address the lack, **the aim of the study** is to investigate the attitude of pre-service teachers’ attitudes towards using CALL in Kazakhstani context. Within the framework of this research the following research questions tried to be achieved:

- 1) What are the participants’ levels of attitudes towards using CALL?
- 2) Are there any differences between male and female participants’ attitudes towards using CALL?
- 3) Are the participants attitudes towards using CALL according to their years of study at the university?

Methodology. The present study carried out with a quantitative research design using survey methodology to collect and analyze the data; therefore this study is considered as a descriptive-survey research in nature. *Descriptive research* is a type of *research* that is used to describe the characteristics of a population by observing and measuring without manipulating variables [12]. It was a cross-sectional study, since the data was collected at one given point in time across EFL pre-service teachers as a sample population [13].

The population of the study consisted of 125 undergraduate students of ELT department at Khoja Akhmet Yassawi International-Kazakh-Turkish University. The participants were selected based on convenience sampling method. In convenience sampling participants are used in the study simply because they are “convenient” sources of data for researchers [14, p. 167]. Participants were the first and second year students of which 93 were females and 32 were males.

The attitude towards CALL questionnaire developed by Vandewaetere and Desmet [15] consisted of 20 items was used in the study. The scale composed of the three-component theory of attitude: cognitive, affective/evaluative and behavioral components. The first cognitive component includes items related to intelligence and foreign language aptitude. The second component affective/evaluative includes items related to the integrative/instrumental orientation and motivation, teacher influence and specific beliefs about CALL and trust in CALL. Last component called behavior/personality includes items subdivided into to inhibition and exhibition. The participants rate on a 5-point (ranging from 1 – totally disagree to 5 – totally agree) Likert scale. Higher scores represent more positive attitudes towards CALL. The internal consistency of the scale was found .877 with total 20 items, which indicates that the scale used in this study is reliable.

A survey, using a self-administered *questionnaire*, was conducted amongst ELT students during the fall semester of 2022–2023 academic years. Data analysis was carried out in order to address the research questions formulated for

the current study. Statistical program IBM SPSS Statistics 23.0 was used to analyze the data. Descriptive statistics as well as inferential statistics (independent samples *t*-test, one way ANOVA) were conducted for the study.

Results and discussion. The findings related to the first research question related to the attitudes of students towards the use of CALL obtained with the help of descriptive statistics were presented in the Table 1.

Table 1

Descriptive statistics					
Indicator	N	Minimum	Maximum	Mean	Standard deviation
Attitude towards CALL scale	125	2.75	5.00	3.8180	0.51031

Since the highest score is considered as 5.00 the results indicated that participants possess positive attitude with regard to the importance of CALL in the foreign language learning ($X = 3.81$).

The second research question was aimed at investigating whether there is a difference between male and female undergraduate students possess different attitudes towards using CALL in the foreign language learning. Independent samples *t*-test was performed to obtain the answer to this research question. The results are given in Table 2.

Table 2

The results of <i>t</i> -test						
Indicator	Gender	N	Mean	Standard deviation	<i>t</i>	<i>p</i>
Attitude towards CALL scale	Male	37	3.8054	0.53668	0.178	0.859
	Female	88	3.8233	0.50189		

Note: $p < 0.05$.

According to the results of independent samples *t*-test there was no difference between male and female participants attitudes towards using CALL in learning foreign languages ($t = -.178$; $p = .859$).

Following, to investigate whether the attitudes of undergraduate ELT students' attitudes towards using CALL differ according to their year of studying at the university, one way ANOVA test was performed. The results obtained are presented in Table 3.

Table 3

The results							
Indicator	Year of study	N	Mean	Standard deviation	<i>F</i>	<i>p</i>	LCD posthoc
Attitude towards CALL scale	1	41	4.0415	0.45756	7.839	0.001	1-2
	2	35	3.8114	0.43893			1-3
	3	49	3.6357	0.53405			-

Note: $p < 0.05$.

The results of ANOVA test revealed that participants attitudes towards using CALL are differ with regard to their years of studying at the university ($F = 7.839$;

$p = 0.001$). So that there was found statistically significant difference between first and second year students mean scores ($X = 4.04$; $X = 3.81$) and between first and third year students mean scores ($X = 3.63$).

The main purpose of the present study was to investigate pre-service English teachers' attitudes towards using CALL in the language classrooms in the Kazakhstani context. The results of the study indicated that participants have positive attitudes towards integrating CALL applications into language classrooms. The participants believe that CALL gives flexibility to language learning ($X = 4.43$), that integrating CALL provides with better learning atmosphere and performance ($X = 4.53$). It was also revealed that the participants are willing to use computer-assisted language learning in the process of language learning ($X = 4.21$). It is clear that the participants accept advantages of implementing CALL in the language classrooms.

Conclusion. The results of this study are in line with the results of other research studies. For instance, Abu Seileek, found that Saudi EFL learners express positive attitude towards CALL [16]. Another study conducted in Iranian context by Rahimi and Yadollahi revealed positive attitudes of students towards CALL [17]. Oz in his study investigated that Turkish students also possess positive attitudes towards integrating CALL into the language learning process [18]. Similar study conducted by Lai et al. on determining students' attitudes towards using internet tools revealed that participants have positive views towards using internet tools by explaining that they can make online discussions anytime and anywhere [19].

Moreover, the results of the analysis indicated that students' attitudes do not differ according to their gender differences. Male and female participants' showed similar results on their answers. The results provided by Son partly support the results of the present study, by showing that Iranian female students have more positive attitudes towards using CALL rather than male participants. However, it is also stated that the attitudes of Iranian students' attitudes is not affected by the personal characteristics such as age, gender or technology access [20].

Following result of the present study was related to the difference between participants' attitudes towards using CALL according to their age of study at the university. It was found statistically significant differences between first year and second year students and first year and third year students' views towards using CALL in language learning. First year students' displayed more positive attitudes towards using CALL rather than second or third year students. It can be explained by the age of the students and that they were forced to study online during the pandemic period COVID-19 longer than second and third year students.

However, there are some limitations related to the research. First of all, the numbers of participants were restricted to 125 pre-service English teachers studying at Foreign Languages Teaching Department. Besides, the study was conducted as a descriptive study in which data was obtained from the questionnaire. Further research studies might be conducted in the form of mixed design in order to get more detailed information to support or understand the general results found with the help of questionnaire.

References

- [1] Smith RC. The UNESCO convention on the protection and promotion of the diversity of cultural expressions: building a new world information and communication order? *International Journal of Communication*. 2007;1(1):31.
- [2] Li L. *New technologies and language learning*. Bloomsbury Publishing, Palgrave Macmillan; 2017.
- [3] Januszewski A, Molenda M. (ed.) *Educational technology: a definition with commentary*. Routledge; 2013.
- [4] Soleimani H. *Computer assisted language learning: theory and practice*. Iran: Payame Noor University; 2021.
- [5] Levy F. *How technology changes demands for human skills*. Massachusetts Institute of Technology; 2010.
- [6] Kessler G, Hubbard P. Language teacher education and technology. In: Chappelle CA, Sauro S. (eds.) *The Handbook of Technology and Second Language Teaching and Learning*. Wiley-Blackwell; 2017. p. 278–292.
- [7] Uzunboylu H. Assessment of student scores based on specific variables in the web-assisted English grammar exercises. *World Journal on Educational Technology: Current Issues*. 2019;11(3):205–219.
- [8] Elaish, MM, Shuib, L, Ghani, NA, Yadegaridehkordi, E, & Alaa, M. Mobile learning for English language acquisition: taxonomy, challenges, and recommendations. *IEEE Access*. 2017;5:19033–19047.
- [9] Symonenko, S, Zaitseva, N, Osadchyi, V, Osadcha, K, & Shmeltser, E. *Virtual reality in foreign language training at higher educational institutions*. Tavria State Agro-technological University; 2020.
- [10] Patton, R, Chappelle, N, Fisher, U, McDowell-Burns, M, Pennington, M, Smith, S, & Vitek, M. Teaching general systems theory concepts through open space technology: reflections from practice. *Journal of Systemic Therapies*. 2016;35(4):1–10.
- [11] Olibie EI. Using computer-assisted language learning to improve students' English language achievement in universal basic education. *International Journal of Educational Research and Technology*. 2010;1(1):66–71.
- [12] Siedlecki SL. Understanding descriptive research designs and methods. *Clinical Nurse Specialist*. 2020;34(1):8–12.
- [13] Creswell JW. *A Concise Introduction To Mixed Methods Research*. SAGE Publications; 2014.
- [14] Creswell JW, Poth CN. *Qualitative inquiry and research design: choosing among five approaches*. SAGE Publications; 2016.
- [15] Vandewaetere M, Desmet P. Introducing psychometrical validation of questionnaires in CALL research: the case of measuring attitude towards CALL. *Computer Assisted Language Learning*. 2009;22(4):349–380.
- [16] Abuseileek AF. Cooperative vs. individual learning of oral skills in a CALL environment. *Computer Assisted Language Learning*. 2017;20(5):493–514.
- [17] Rahimi M, Yadollahi S. Computer anxiety and ICT integration in English classes among Iranian EFL teachers. *Procedia Computer Science*. 2011;3:203–209.
- [18] Öz H. Investigating the relationship between foreign language learning and call attitudes among EFL freshman students. *Procedia-Social and Behavioral Sciences*. 2015;176:1041–1049.
- [19] Lai, CH, Yang, JC, Chen, FC, Ho, CW, & Chan, T. Affordances of mobile technologies for experiential learning: the interplay of technology and pedagogical practices. *Journal of Computer Assisted Learning*. 2007;23(4):326–337.
- [20] Son J-B. *Context-specific computer-assisted language learning: research, development and practice*. APACALL; 2019.

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