

# Language teachers' ICT up-take in a single university in a developing country Kazakhstan

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# ABSTRACT

This article reports on the findings of what we consider to be the first study of its sort on the use of ICT (information and communication technology) in English, Russian, and Kazakh language teachers in a single university in Kazakhstan. Participants include 111 (English, Russian, Kazakh) instructors from three departments. The study's goal was to look at these language teachers' ICT use and the elements that influence their use of ICT as a teaching tool. The following study issues were addressed using questionnaires and follow-up semi-structured interviews: What is the present state of information and communication technology (ICT) use among a group of language teachers in a single university in Kazakhstan? What ICT skills do language teachers have, and what training is available? What are factors that encourage/discourage the use of ICT in their teaching and learning? Findings support the idea that most teachers have owned their own computers to be used in the class and most teachers in the study had adequate skills. However, computer use is mainly limited to PowerPoint presentations but there are patterns of creative ICT use. Positive factors affecting ICT use include willingness to ICT use in teaching and the benefits to both teachers and learners, while negative factors include inadequate professional support, poor training, and the need for a more holistic approach to ICT integration. The conclusions are that ICT is acknowledged as essential and advantageous to language learners as well as teachers from a teaching perspective and that teachers require additional training: to provide training opportunities at the institutional level to support their ICT use and to help language teachers better understand the pedagogy of technology use and incorporate ICT into their instruction. The authors propose that this type of support might be offered through professional development activities that are tailored to the context of language teaching and learning.

Keywords: ICT use, language teachers, developing country, encouragers, discouragers, education

Article history			
Received:	Revised:	Accepted:	Published:
01 October 2022	31 October 2022	31 December 2022	10 May 2023

**Citation** (**APA Style):** Nogaibayeva, A. A., Kassymova, G. K., Triyono, S., & Winantaka, B. (2023). Language teachers' ICT up-take in a single university in a developing country Kazakhstan. *Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan*, 42(2), 295-309. DOI: https://doi.org/10.21831/cp.v42i2.57488

# INTRODUCTION

As a developing county, there have been many attempts to reform the education system in Kazakhstan after gaining its independence over the past decades under the Law on Education (1992) and the Law on higher education (HE) (1993). The Government of Kazakhstan agreed to enter the Bologna process (BP) with an aim to join the world education community approved by the State Education Programme of Development (2011-2020). This was followed by becoming a member of the European HE Association to support the creation of a competitive environment for human and economic development by accessing quality education. HE in Kazakhstan has attempted to reform the education system over the past two decades to depart from the Soviet Ideological system. The Soviet legacy was fundamentally guided and committed to political ideology; isolated from global trends; poorly financed that served to educate specialisations linked

to the Soviet economy. Education should be reformed and integrated into sciences (Ilmaliyev et al., 2022; Kenzhaliyev et al., 2020, 2021; Tatyyeva & Zagidullina, 2023; Zharylkassyn, 2023).

Starting from the 1990s the Kazakh government began constructing a new socio-cultural establishment and administered several education reforms under the Law on Education (1992) and the Law on HE (1993) with the purpose of gaining degree recognition and joining the world education community. Therefore, this has led to a large-scale change to HE is upgrading the curriculum, introducing a robust system of accreditation, and requiring a greater degree of autonomy for universities. In addition, HE in Kazakhstan remained the same since the Soviet period as concluded by Raza (2009). This was also further noted by Heyneman (2010) that HE was constrained to track the reforms.

A modernisation of "Kazakhstan Global Competitiveness" has been addressed on the 31<sup>st</sup> of January 2017 by the president of Kazakhstan with the goal of economic improvement and competitiveness. Therefore, The Government programme Digital Kazakhstan (2017) has been launched to support this statement. It is oriented to develop the digital ecosystem in Kazakhstan and consisted of two phases: 1) 2016-2019; 2) 2020-2025. This programme aimed to facilitate the digital modernisation of Kazakhstan by creating a high-speed and secure ICT infrastructure, developing of digital society as well as the digital transformation of the economy and government's digital affairs. The scope of the programme has impacted HE institutions emphasising the development of students' professional careers as qualified specialists with digital competencies and skills within the frame of lifelong education (Kassymova et al., 2021). However, the technology integration and the initiatives of the ICT implementation have not been much studied. Even though the National report statistics showed 98 % of urban and 97 % of rural schools and the process of ICT integration has covered the whole secondary schools as reported by Damitov et al. (2009). The results of the research conducted by Kerimbayev et al. (2016), Kaskatayeva (2014) revealed that ICT integration has not reached its desired level.

There are several researchers who discussed the Government's programme related to the development of computer literacy at schools and the expansion of 'Informatisation' such as internet infrastructures throughout schools. Kerimbayev et al. (2016) suggested implementation of e-learning in undergraduate schools could improve the quality of education by providing access to remote schools and educational resources. However, there is a lack of research in relation to teachers' ICT take-up in HE in Kazakhstan.

This is a study of three different languages teachers' ICT use in teaching English, Russian, and Kazakh in a single university in Kazakhstan. A long view of technology use in language teaching and learning has developed over time, affecting language teaching, and learning at various points in history. ICT has made it possible for language learners and teachers to better help and facilitate access to the target language (Wang et al., 2015). Communication opportunities for language learners to interact beyond the classroom (Warschauer & Healey, 1998). The benefits of chat communication have been viewed by several authors increased speaking proficiency by practicing text and voice chat (Satar & Özdener, 2008); Blog Assistant Language Learning (BALL) can be used to improve writing (Kung, 2018). There is a strong focus, particularly for students with no access to learning on the benefits of MOOCs (Massive Open Online Courses). Many researchers have associated the use of ICT with the experience of the cultural context, for example, Absalom & Pais Mardeu (2004) discussed the development of linguistic abilities in a cultural context. Using Virtual Reality in German classes increased students' cultural knowledge in a more meaningful way (O'Brien & Levy, 2008). Information technologies and virtual reality can be properly used not only in language teaching but also in all school subjects and as well as in higher education from the perspective of technical sciences, to avoid some dangerous laboratory experiments (Besimbayeva et al., 2023; Hendri et al., 2021; Tyo & Zeitinova, 2023). However, the choice of technology is selected due to specific enabling features, but ICT use is not associated with pedagogy. For instance, Clark (2000) argued that the pedagogical use of ICT was motivating, enabling innovative teaching to facilitate student engagement. And this has been well documented (Glover & Miller, 2002) using IWB in teaching to support instructional practice. Although there has been research in favour of ICT use in language teaching and learning, teachers' beliefs on traditional teaching methods have been addressed in the tertiary setting of Japan (Coldwell & Simkins, 2011). Despite the opportunities which ICT creates in language teaching and learning the issues of ICT use remained across a range of contexts and countries. As noted by Slaouti & Barton (2007) concerns about the ICT take-up in language and learning tends to fit a similar picture. There is more that can be found in the literature on encouraging and discouraging factors (Cubukcuoglu, 2013).

This paper will report the results of a study that investigated the concerns of English, Russian, and Kazakh Language teachers in a single university in Kazakhstan. Data were gathered through surveys and semi-structured interviews with the teachers regarding (a) current ICT use in teaching and learning; (b) the language teachers' ICT skills and training, and (c) the factors that affect the use of ICT in language teaching and learning. An overview will be provided of the general findings of the surveys, supported by interviews.

This study set out to explore how and why a group of language teachers at a university in Kazakhstan used ICT in language teaching and learning. As a developing country, this is an underresearched area, taking a critical view of the factors at different levels to understand teachers' perceptions of ICT take up. This is the study of a single university in which three languages were taught in the faculty which consisted of six departments. General English is taught alongside Kazakh and Russian languages across different departments. The university has over 100 departments and 20.000 male and female full-time students. Teachers were expected to use ICT in their daily teaching as it is required at the policy level. But most classrooms lacked ICT resources, each department owned two data projections to be used in turns, and only some of the classes had single computers. Nearly all the teachers as well as students had their own computers and smartphones. The University campus provided a wireless Internet connection.

Understanding the factors affecting ICT use in language teaching and learning, including the availability of adequate support for ICT are important considerations as this was required at the policy level. Understanding attitudes towards the use of ICT, and the support needed to use ICT in teaching could help teachers to use them better. The study identifies challenges that teachers face in their attempts to implement ICT in language teaching and learning. An awareness of challenges that teachers face could help to provide some recommendations for overcoming these challenges at different levels (teacher, university, beyond the university), develop useful training programmes, and encourage the use of ICT in the case of the university. It could also help the Ministry of Education to understand policy-level issues and meet the needs of universities to the adoption of ICT and to accomplish the national agenda to be on the list of developed nations by the year 2030.

# METHOD

The research design for this study uses a mixed-methods design that combines quantitative and qualitative methods: questionnaire survey, and interviews. Considering the questions and the purpose of the study, and to maximize both the breadth and depth of the insights generated (Creswell & Creswell, 2018), quantitative and qualitative approaches were used in this study. For the questionnaire and considering the broad range of our review and the broad range of tools I am interested in and prefer to use ICT (Information Communication Technologies).

This was a single case study where mixed methods were used. The study was carried out between 2017-2021, with data collection taking place in 2018. Qualitative and quantitative different methods were used: a questionnaire survey which was divided into eight sections covering in a total of 39 items including demographic factors (gender, age, teaching specialism, and experience), reported ICT use: encouragers and discouragers of ICT use. A total of 111 questionnaires were completed out of the population of 298, with an overall response rate of 37 %. Descriptive statistics were generated to present findings.

The questionnaire was created on the questions that had previously been administered to primary and secondary school teachers to assess their attitudes toward and use of ICT (Eickelmann & Vennemann, 2017). This provided the authors of this study with a framework for a questionnaire that had already been through reliability and face validity testing as it was based on surveys from a prior NFER survey of in-service teachers (NFER, 2012) and the pedagogy parts

of the questionnaire were created by Snider & Roehl (2007). The authors of this research choose not to use these pre-made questionnaires for the simple reason that they were created a long time ago and that ICT has changed greatly since then. Additionally, a large portion of the questions from those surveys were unrelated to this study and made the questionnaire too long. As a result, these questions (in particular, a lengthy section about beliefs) were removed to save time and reduce complexity. The questionnaire questions were adapted to the context of a HE is setting and have been piloted with 20 teachers.

The reliability of the questions was tested by inter-item correlations measured by Cronbach's alpha coefficient (Cohen et al., 2007). Cronbach's alpha was calculated using SPSS. The results revealed that the questionnaire had an acceptable alpha coefficient (see Table 1).

Theme	Number of items	Cronbach's alpha
ICT training	3	0.659
ICT use	10	0.877
Attitudes to ICT	8	0.668
Access to ICT	7	0.719
Beyond institution	3	0.621

Table 1. Reliability of the pilot study

The interviews were carried out face to face as well as via Skype, interviews (n=9) via skype (three Kazakh, two Russian, three English, and one deputy dean), and the other 7 interviews were carried out in person (three Kazakh, three Russian, two English). Interviews enabled a more in-depth examination of beliefs, attitudes, and perceived impact of ICT use in teaching and learning. The interviews were open-coded and then congregated under themes: ICT skill and use in teaching, training opportunities, views on pedagogy, and encouraging/discouraging factors for ICT use.

#### FINDING AND DISCUSSION

Since the 1960s, ICT has been used in language education and the acquisition of second languages, but before 2000, computer technology was mostly employed in the instruction of reading, writing, literacy, and cultural awareness (Chapelle, 2003). Further studies on ICT use have focused more on the use of ICT to improve language proficiency or cultural awareness (Meskill & Anthony, 2005); the development of new roles for teachers, students, and computers (Stepp-Greany, 2002); responses to multimodal approaches (Ushida & Kinoshita Thomson, 2003) 2003); the usefulness of CALL in connection to teaching certain language skills, such as enhancing second-language reading (Luke, 2003) or assisting vocabulary acquisition (Nikolova, 2002); and the use of computers as a communication tool (O'Dowd, 2003).

Inhibitors to ICT adoption among teachers include (but are not limited to) the development of teachers' favourable attitudes toward computers is believed to be a significant aspect in supporting computer integration and the enhancement of quality learning and teaching using computers (Yuen & Ma, 2002). According to their research, the development of favourable attitudes among teachers depended on their perceptions of ICT as being practical and simple to use, and this needed "continual support for experiential learning" (Yuen & Ma, 2002). In the early studies access to ICT for personal use was found to be necessary for fostering positive attitudes (Cunningham et al., 2003). Direct evidence that a lack of personal access to ICT contributed to a lack of trust in professional usage was discovered by Preston & Cox (1999) and Guha (2003).

The factors that influence the use of ICT including usefulness, teachers' confidence, and motivation was discussed (Cubukcuoglu, 2013). For Zhang et.al. in 2023 teachers' lack of understanding of the benefits of ICT use was a barrier. More research findings are quite similar (Khaloufi & Laabidi, 2017) found teachers' lack of knowledge and skills impede ICT use implementation. However, Jääskelä et al. (2017) argued the need for more systematic research on teachers' personal level factors such as beliefs, and attitudes. Ertmer et.al. (2012) proposed them

as second-order barriers (teachers' knowledge, attitudes, and beliefs). Access to resources, technical support, and ICT training were considered as first-order barriers (Ertmer et al., 2012). Helm (2015) further provided evidence for institutional-level barriers (lack of technical support, limitation of time, and problems of organisation) in the study of European HE that covered 210 universities.

Many studies found how crucial it is to incorporate pedagogy along with fundamental skills while discussing ICT training and support. To influence teachers' use of ICT for teaching and learning, Veen (1993) discovered that teachers' pedagogical abilities were more significant than their technical ICT skills. In studies on the use of ICT in initial teacher education, Wild (1996) and Simpson et.al., (1998) discovered that knowing the goal of ICT use was essential to its successful application in teaching and learning.

The effectiveness of teaching is dependent on teachers' knowledge and abilities, which are crucial in helping pupils understand what they have learned (Qader & Arslan, 2019). ICT aids educators in lesson preparation in a variety of ways, including the ability to find and download digital materials that are pertinent to their teaching (Nilsson & Karlsson, 2019). According to Lin & Yunus (2012), who conducted their research in Malaysia, the use of ICT tools by instructors improved the effectiveness of their instruction, raised student participation in class activities, and encouraged them to delve deeper into their available learning materials. According to Jonassen et.al. (2003), who claimed that "stories told by teachers about their personal experience with incorporating technologies in the classroom could be used to assist other teachers learn how to use technology". Teachers will be better equipped to put what they have learned from their colleagues into practice as they learn how to adapt technology to their setting and suit the specific needs of their students.

Providing equal opportunity for all the staff at the institutional level has been argued by Anas (2019). Some researchers draw attention to the existence of factors that are beyond the institutions' control, policy-level factors. Arlinwibowo et al. (2020) and Begimbetova et al. (2023) pointed out that digital literacy factors can affect individual teachers' behaviour and beliefs thus creating uncertainty in expectations of ICT use. Rana et al. (2020) also noted in their study the gap between ICT policy and ICT implementation at schools.

Thus, there is a huge body of literature addressing the challenge of integrating ICT into language teaching and learning. The findings given here make it clear that more study is necessary to pinpoint the main problems influencing language teachers' ICT use. This type of study is essential in Kazakhstan, where the use of ICT in language teaching and learning is still relatively new and where little is known about ICT implementation in the tertiary sector.

## Finding

The findings focusing on the teachers' use of ICT in language teaching and learning are presented and covered: the variables describing the use of ICT related to language teaching and learning; the factors associated with the use of ICT in teaching and learning language; and ICT use skills in language teaching and learning. The data from the questionnaire were analysed using SPSS. Thematic analyses were applied to present the interview findings.

#### The current use of ICT in language teaching and learning

Table 2 presents 10 statements on the use of ICT and gives weighted means and modal responses. This section discusses teachers' views on the frequency of ICT use in language teaching and learning. ICT was used consistently as evidenced by the modal responses of *always*, *sometimes*, *and often*. It turns out that more people than I had thought to use ICT, which is rather intriguing. Internet and PowerPoint presentations for resource preparation were the ICT applications that were used the most frequently. This implies that the use of ICT includes accessing or conveying information. In addition, a surprisingly high percentage of responders communicated with their students by phone and email. This may indicate that the teachers felt at ease using emails or smartphones. Hardware and the IWB were not used, most likely because they were rarely accessible in the classroom. It is apparent that teachers were open to recommending their students to use internet resources.

N		Nev	ver 0	Rar	ely 1	Som	etimes 2	Oft	en 3	Alw	ays 4/	Valid	Weighted	Modal
No.	Statements		%	Ν	%	Ν	%	Ν	%	Ν	%	response	mean	response
1.	I use the Intranet (in some universities there is also a portal "Intranet") to send course information to students.	5	5	13	12	13	12	31	28	49	44	111	2.95	Always
2.	I use Internet to prepare my resources	2	2	11	10	25	23	48	44	23	21	109	2.72	Often
3.	I use Power Point or other presentation software in my lessons.	1	1	14	13	33	30	40	37	21	19	109	2.60	Often
4.	I use a mobile phone to contact students about lesson issues.	9	8	12	11	29	26	33	30	28	25	111	2.53	Often
5.	I send and receive students` work by email.	4	4	16	15	31	28	37	34	21	19	109	2.50	Often
6.	I recommend students to use testing and revision online resources. (e.g., quizzes, presentations)	4	4	12	11	45	41	26	23	24	22	111	2.48	Sometimes
7.	I encourage students' ICT use out of class (e.g., discussion forums, blogs, wikis)	4	4	16	16	36	33	27	25	27	25	110	2.51	Sometimes
8.	I prepare lessons with the help of ICT	4	4	14	13	40	36	33	30	19	17	110	2.44	Sometimes
9.	I use the CD-ROM that comes with the textbook in class.	19	17	18	17	31	28	21	19	20	18	109	2.04	Sometimes
10.	I use IWB (Interactive White Board) in lessons.	28	26	25	23	29	27	16	15	10	9	108	1.58	Sometimes

Some of the teachers interviewed expressed their opinion that they frequently use ICT for "projection", and "creativity" during the lesson and for "lesson preparation", and "communication" outside the classroom. One teacher said that the most common use of ICT was "*projection*". Presentations with the projector improved students' memory to help them think better.

"I remember the lesson where I was teaching students [about] Kazakh national holidays. I used the class equipped TV channel 'Arna' and made my presentations, I also showed them short video clips, cartoons with subtitles. After this lesson, I noticed that when the students came for my next lesson, they could remember everything."

Another teacher, ET4, mentioned the benefits of giving presentations during class, saying that,

"During the lessons, I especially like to give presentations, it helps me organize my thoughts and makes it easier to present the important points of the material. Sometimes I use CDs of English textbooks containing practical exercises for each unit, just to review the material learned each week."

Teachers discussed applications of technology in the classroom that were "*particularly creative*" and went beyond the standard projection of presentations. The ET2 teacher shared an interesting experience of using "video scripting" in the classroom when teaching new vocabulary and spelling:

"I like to use the program 'Video Script' to create animations. For example, I can choose the names of the characters, the style of the video, the music. The students check the spelling by watching these videos, then write the word and visually learn a new word at the same time."

"To *prepare a lesson*", most teachers found the Internet very useful for accessing material. ET1 explained that she used Google to search for learning activities to encourage students" engagement,

"I use google a lot to find additional online activities for writing skills, because a lot of students struggle to write good essays, so they follow the steps to write a first draft, learn the topic sentence, things like that."

Some teachers have recognized the importance of online communication to stay in touch with students. For example, they can receive student work via email and provide feedback in the same way. In this regard, KT3 stated that,

"I use email to receive work from my students, for example, if they have a task to do, they email their first draft, then I give my feedback after they tell me. Then I sent their second draft. This way they learn to organize it and make a good presentation, otherwise they put everything while copying the books. Afterwards, when they get my approval, they make their presentation in front of the class."

# Staff members' ICT skills/confidence

When it comes to confidence and ICT skills (Table 3), the majority considered themselves to be reasonable in their level of skills and confidence. However, a small minority describe themselves as reluctant. Overall, lack of skills is unlikely to be the key factor in low ICT use, except in a few cases.

<b>I</b>	8	
ICT skills/confidence	Ν	%
Reluctant	16	16
Reasonable	53	53
Confident	31	31
Total	100	100

Table 3. Breakdown of the respondents according to ICT skills/confidence

*Note: 100 valid responses* 

Table 4 and Table 5 show that most teachers had not attended long or short CPD training courses or workshops to improve their ICT skills. This discovery was interesting because teachers must follow at least 70 hours of CPD training per year. To elaborate, CPD, or (Teacher Training Organization "Orleu"), are training programs that the university offers to staff; these programs cover a wide range of topics and skills that staff can develop, including (assessment, innovative trends) and the use of ICT. The fact that most participants did not take CPD training in ICT reflects their preference for other courses rather than ICT. This may be due either to teachers not seeing ICT courses as a necessity, or to the fact that they have already taken these courses in previous years or have acquired ICT skills in other ways. On the other hand, it could indicate a reluctance of some people to develop their skills.

	Answer						
Statement	Y	es	No				
	Ν	%	Ν	%			
Have you ever attended any long CPD (Continuing Professional Development) courses on using ICT for teaching and learning?	37	34	73	66			
Note: $N = 110$ respondents							

#### Table 4. Breakdown of the respondents according to long term CPD training experiences

## Table 5. Breakdown of the respondents according to short term CPD training experiences

	Answer						
Statement	Y	es	No				
	Ν	%	Ν	%			
Have you ever attended any short CPD courses on using ICT for teaching and learning?	49	45	60	55			

*Note: N* = 109 *respondents* 

In general, teachers wanted to develop their teaching and take "training provided by their department". For example, teachers in the Russian department improved their teaching skills by undergoing training and RT4 explained,

"The department trains teachers to improve teaching content (curriculum), teaching skills. For example, last year a guest from RUDN was invited to give us a seminar on contemporary Russian literature. And I also took an online course organized by our department. It was a two-week training [course] on the use of cloud technologies; in the end, I was certified."

Some teachers have found informal learning opportunities by taking "online training". For example, KT1 stated that,

"I do three to four online training events a year. And I prefer online training for its time convenience."

The teachers of the three departments found the Orleu training very useful. However, ET4 added that events can only accommodate a limited number of attendees.

"It's good that the department provides training from Orleu, but not all teachers have the chance to attend. They could allocate a limited number of participants on a "first come, first served" basis. For example, this year, they offered ten places while each department had the possibility of allocating two professors."

## ICT use encouragers and discourages

Belief in the impact of ICT was a major element that encouraged teachers to use it, but there were several contextual conditions to consider. Here we look at access, personal qualities, training, and the wider environment as both enablers and disincentives. Encouraging and discouraging factors are covered together as a single condition, for example, internet access, could be an encouraging (if present) or discouraging (if absent) factor. Table 6 encouragers to use ICT and Table 7 those who discourage the use of ICT present the encouragements and discouragements to the use of ICT as presented by the interviewees.

No.	Sub themes	
1.	Access	
2.	Personal qualities	Willingness to use own initiative
3.	Wider environment	Support from IT services/department
		Management
		Government backing

## **Table 6. Encouragers of ICT use**

No.	Sub themes	
1.	Access	Classroom facilities
		ICT compensatory
2.	Wider environment	Support from IT services/department
		Management
		Government backing

#### Table 7. Discouragers of ICT use

#### Access

The most important contextual issue in the use of ICTs was 'access'. "Access" as a factor was mentioned both as an enabler in the use of ICTs, but also as a key disincentive. Some teachers taught in classrooms with an interactive whiteboard, and this encouraged them to use technology. Other teachers had access to laptops and projectors, which enabled them to use ICT in the classroom. For example, teacher KT6 explained that teachers taught in classrooms without a computer or a fixed projector, but they had a portable projector, and all teachers had laptops they could bring to class,

"Each department has two portable projectors, which are easily accessible to everyone who wants to use them. It is not difficult to book it beforehand. Alternatively, if I go to teach in other departments, I can use their projector also; some classes across different departments have classes with fixed projectors."

There was a Wi-Fi system within the university and internet access was free for university students and teachers. KT3 found that Internet access increased ICT use,

"Nothing stops the teachers using ICT, they are all competent enough. Anyway, they use it at least for administrative purposes. But classroom conditions can be the reason to stop them using it (for teaching). However, with free Internet, young teachers like me [can] always scan different websites, to show students how to search hundreds of topics. In everyday life, I use it more and more."

#### Access as a discourager

As mentioned earlier, "*access*" was mentioned as a barrier to the use of ICT by many teachers. However, the following results demonstrate that it is lack of access, rather than access to ICT itself, that is discouraging, as many teachers seem to want to use ICT more but cannot be due to this lack of access. Regarding access, most teachers complained about the lack of ICT facilities in the classrooms, as well as in the offices. Lack of access was the main reason for the lack of use of ICT, as KT6 put it,

"Conditions of the classrooms are awful, even in some classes there are not enough plugs, wall sockets."

Lack of access to ICT covered "*lack of ICT resources*" such as computers and projectors in classrooms, which meant that there was a need to find compensatory strategies. Most teachers were willing to work around the lack of access, but this brought new responsibilities and was ultimately unsustainable. KT6 and RT2 explained that the lack of access placed additional responsibilities on teachers and added that it was unrealistic to expect teachers to bring the projector to every classroom.

"At our university, ICT level is very low, and it causes difficulties. If there is a fixed projector in every classroom, it will make our life easier but for now, we have two projectors for forty teachers. And every time when you use it, you are the one who is responsible to bring it back safe without any damage."

#### **Personal qualities**

We consider personal qualities as another contributor to the decision to use ICT. The first encouraging element was the "*willingness of teachers to use*" their own initiative. For example, KT2 was pushed to use it by internal factors,

"I use technology because of my students. Nobody encourages me to use it, not the administration or staff members. The main reason is I want my students to be competitive members of society."

Another teacher was enthusiastic about using technology and was willing to do more to learn more about it. KT5 explained that,

"I really do not know what prevents the use of technology. I think these might be the teachers who believe that the content of teaching is more important than the use of ICT. But I wonder how they teach without using it. In my opinion, there is nothing to stop using it if you are passionate to use, you will find the ways to use and you do not need to be encouraged."

Through these examples, the agency of teachers, their willingness to engage, is brought to light. They made the effort to use the technology because they believed it was worth it.

## The wider environment

When teachers were asked about the wider environment, they covered the level of support received from department heads, as well as potential support from students in terms of technological repair, support from university authorities and their doubts about support of the government. The level of support received from "IT" varied. For example, KT1 explained that she could text for help,

"At our university, we have an IT department to deal with any technical fault. The easiest way is to send a note through Outlook. Sometimes support comes instantly but I cannot say that we always receive immediate support."

Another teacher felt that the students were a potential support in the classroom because they knew more about technology. For example, KT2 said,

"When I have problems with technology during the lessons, I can ask my students because I do not want to waste my time or sometimes, I fix it myself too."

Teachers felt there was an encouraging discourse around technology at university level and ET2 noted that,

"I think our university in general supports the use of ICT. We have a lab class with a big screen TV, computer class for synchronous translation. We would not have these changes if the university authority was not interested in supplying with ICT resources."

KT1 also felt encouraged accessing online resources and noted the government support in creating KZ websites,

"At the university level, we have the departments to deal with technological supplies. However, at the Ministry level, creating KZ websites is great support for teachers. For example, these websites were created by Government grant and the number is growing. I am grateful to use them in my lessons."

## Wider environment as a discourager

As the previous examples show, in general, teachers were very receptive to the adoption of ICT in their classrooms and showed a willingness to learn new skills. However, when asked if the university, and in particular the head of department, was committed to adopting ICT, the responses were varied. RT2 did not believe that the "head of department" was supportive, given that there was a lack of equipment indicating that,

"I cannot say neither the dean nor the head of the department are supportive. Maybe they support others, but I have never experienced any of their support. We have two portable projectors for 40 teachers, an anecdotal situation. There are classrooms with IWB, but they are not accessible to everyone."

There was a general feeling that leaders were "*paying lip service*" and not addressing the range of actions needed to enable the use of ICTs. Regarding the wider environment, one of the teachers mentioned that the policy as written supported the use of ICT, but that made no sense without the resources. RT4 said,

"We have the policy that supports the use of ICT, but teachers do not need written encouragement, we need a working policy that meets our demands. For example, if they want us to use technology in the classrooms at least we need computers with projectors. The projector is very fragile, it is not for carrying from one class to another."

Another teacher, ET3, believed the Ministry of Education (MoE) needed a 'proper plan' for the integration of ICT,

"I don't think that there is any support from the government. If the ministry provided backing, we would not be experiencing a lack of technologies. To tell the truth, even the technologies, the equipped classes have been sponsored by the graduates of the university."

RT3 was not optimistic about 'government backing' stating that,

"Nobody cares about the implementation of ICT. I don't think there is a policy. It is only teachers' personal interest."

## Discussion

Overall, many teachers agreed that ICT was helpful with students' engagement and organisation of classroom language teaching and learning, for example, to prepare classroom materials, to support the after-school extra curriculum. The results of this study show that many language teachers understood how ICT may assist both themselves and their students. Additionally, participating teachers believed that ICT could help with their student's learning. These factors encouraged language teachers to use ICT. This result confirms other studies that show how teachers' openness to change affects their readiness to use technology in the classroom (Nilsson & Karlsson, 2019). For example, watching video clips from a laptop, and encouraging students to create their own video clips to learn vocabulary. Overall, all the sources of data were quite consistent that ICT use had value in language teaching and learning. And this is in line with the literature, the benefits of up-to-date authentic materials, and teachers upgrading their teaching style (Nilsson & Karlsson, 2019). According to the study also found that help at several levels, such as technical support, support from university officials, and peer encouragement, made teachers more eager to use new technologies. In terms of technical assistance, Helm (2015) proposed that students serving as "technology experts" in class may help with the integration of ICT. Teachers must comprehend this to help students participate fully in the integration of ICT as supported by Lin & Yunus (2012). In this current situation, it is highly likely that university administrators and education authorities beyond the institution will play a crucial role in encouraging teachers to use technology in their instruction.

Findings from all sets of data revealed that access and personal characteristics acted as both encouragers and discouragers of ICT use. For example, access to desktop computers in the classroom was viewed as a discourager when teachers brought their own laptops and the use of students' mobile devices enabled ICT use in teaching therefore, viewed as an encourager, in the literature has been supported by earlier studies as well as recent ones (Cunningham et al., 2003). Lack of access to ICT was a barrier not all could count on portable projectors because each department owns two projectors to be used in turns. The lack of desktop computers in the classrooms meant that teachers had to bring their own laptops. Internet was provided in teaching rooms and teachers as well as students were able to use it therefore issues with Internet connectivity did not arise. Many teachers felt that easy access to the Internet had increased their use of ICT.

Interview data showed that most of the teachers found courses that were provided by other organisations useful however, some of the teachers complained that access to training courses on ICT use was problematic as it accommodated only a limited number of teachers as Ertmer et.al. in 2012 viewed them as second-order barriers. As the survey data showed, most of the teachers had not attended ICT training courses. A few teachers felt that attending training courses was useless because they found it difficult to apply those skills in teaching as ICT was seen as a barrier.

Survey and interview data suggested personal qualities are very important as their views in relation to access, and support received may impact their views. Interview data revealed that

teachers' willingness to use ICT contributed to their decisions to implement ICT in teaching. The most noticeable finding in all different sets of data was that teachers tended to use ICT to be in contact with their students. In the interview data, some teachers expressed their greater concern for their relationship with students. For example, using emails in order to support them during exam times. They believed that ICT would benefit on both cognitive and affective grounds. ICT is acknowledged as vital and helpful for language learners, and the majority of teachers from three departments do feel themselves an acceptable learning environment for ICT use but teachers' adoption of technology in the classroom is still comparatively low. Technology adoption was shown to be negatively impacted by both internal and external factors, or "first-order obstacles" and "second-order barriers," respectively (see, for example, Ertmer, 2010; Ertmer et al., 2012). It is obvious that integrating ICT successfully into an efficient program is a difficult process that is only partially understood.

# CONCLUSION

To sum up, a variety of professional practices might be taken by teacher educators and local educational authorities to enable more effective adoption and integration of ICT, according to the data analyzed in the current study. First and foremost, all language teachers must have adequate training that addresses both pedagogical and technological difficulties. Such training programs should help instructors to re-evaluate their responsibilities in language classrooms, increase understanding of the importance of ICT, and encourage more creative methods of teaching. Second, ICT training that combines the finest methods for teaching and learning languages and makes the most use of already available technology is required. Finally, a comprehensive reform of the curriculum, teaching materials, assessment practices, and ICT use must be implemented immediately in order to guarantee a completely integrated use of technology. Only by implementing such reforms is it possible to increase the use of technology and real language practice.

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