

TEACHERS ' ATTITUDE TOWARD USE ICT TOOLS IN TEACHING AND LEARNING PURPOSES IN NORTHERN CYPRUS SECONDARY SCHOOLS

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Abstract

Integration of Information and Communication Technology (ICT) assists teachers in teaching and facilitates delivering knowledge to students. This study aims to investigate the extent to which Information and Communication Technology (ICT) is used in secondary schools in Northern Cyprus from teachers' perspective. It also aims to examine the effectiveness of ICT in teaching and learning and determines the factors that hinder the use of ICT. The study employed a quantitative research design. Data was collected using a descriptive survey. The sample was chosen using a convenience sampling method. The sample consists of 182 secondary schools teachers. The collected data was analyzed through SPSS (Statistical Package for the Social Sciences). The results revealed that most of the respondents view high positive attitudes towards implementing ICT. In addition, a high level of awareness is reported by teachers. However, there are significant dissimilarities among teachers on their perceptions on being confident with ICT, as well as to students learning more effectively through ICT. The results also showed that teachers still adhere to the traditional method of teaching in which teachers are the centre of learning. Some recommendations relating to ICT integration in education are provided at the end of this study.

Keywords: *Information and Communication Technology (ICT), teaching and learning process, secondary school, teachers' attitude.*

Introduction

The goals of teaching and learning are to help people become more educated to benefit the society and to give students the knowledge they need to practice in the workforce. In the last 20 years, the application of ICT has significantly changed the way the business and government sectors handle and carry out most types of work. According to Mwila (2018), integrating ICT into the teaching and learning process improves the quality of education by making the educational process more effective and engaging for students. It is believed that ICT would make it possible to use computerization techniques in the field of education. Increasing productivity requires computerizing activity performance. Consequently, the productivity of education is greatly impacted by the use of ICT in the education sector.

ICT allows for a more student-centered approach in the learning environment. The effectiveness of teaching learning processes is determined by the amount of interaction and communication between teachers and students (Woolfolk, 2004). Although information and communication technologies made effective changes in the business and government sectors, education has traditionally been viewed as a socially motivated industry. ICT in education encourages a more student-centred approach. It will continue to grow and improve as moving rapidly into a digital media and information era (Safdar et al. 2011). It has made significant contributions and improvement in education in both developed and developing countries. ICT is used to manage data, communicate, create, allocate, and store data. Furthermore, by allowing students to find, use, archive, and interact with information, it allows them to take the ownership of their learning and research (Guma et al, 2013).

ICT tools for modifying and updating digital teaching resources save time and effort that can be used to advance other goals, such as the teacher's pedagogical development. The goal of this study is to look into the effectiveness of ICT tools in teaching and learning, with a particular focus on the perception of secondary school teachers. ICT has the potential to transform how people learn, communicate, and share information, resulting in a demand for advanced, modernized academic standards, as well as teaching methodologies and strategies (Fink, 2013). Integration of ICT in education is not a simple or straightforward process; rather, it is comprised of ongoing and repeated revolutions that improve teaching, acquiring knowledge, and resource enrichment (Maaitah, 2016). It is now a common practice to set up an online learning environment for students from various countries. The ongoing ICT educational process has resulted in the interactive teaching and learning environment (Dela, 2007). Students will benefit the most from ICT use in the classroom where they are not constrained by insufficient curricula and resources and teachers can create interesting lesson plans (Khan et al., 2012).

Teachers have a huge responsibility for personal development and staying updated with technological advancements in order to effectively implement technology in the classroom. Northern Cyprus has made significant efforts to integrate ICT into teaching and learning process (Aksal & Gazi, 2015). Olelewe and Amaka (2011) stated that a good teacher

can use many different technologies to improve the entire educational process and to present new opportunities for teachers and students. ICT has put the traditional methods and procedures for teaching and learning to the test. In today's world, it is necessary to be technically literate and to use ICT in order to keep up with the latest news and trends. ICT can assist in the development and improvement of skills, as well as the application of theoretical knowledge and methodology to real-world situations. It can also help to increase employee pay and improve the educational institutions.

Research problem:

Northern Cyprus, like other developing countries, has not yet fully integrated ICT into the teaching and learning process in the educational setting. Despite limitations caused by external barriers, there are numerous factors that influence the use of ICT to improve teaching and learning in Northern Cyprus secondary schools. The incorporation of ICT into education entails the use of technology for both teaching and learning, as well as the use of specialized hardware and software. Because students are already familiar with technology, it can be assumed that they learn better in technologically based environments. As a result, we can conclude that implementing ICT in schools is critical. This is because incorporating ICT into education promotes successful learning and aids in the development of pedagogy. It is true that technology-enabled learning techniques, programs, devices, and equipment can help students learn almost any subject more effectively, including math, science, foreign languages, and the arts. Furthermore, ICT assists teachers and students by utilizing software and computer technology to achieve the learning goals (Jorge, 2003).

The main role of ICT is not only seen in teaching and learning process but also it could help in the assessment and evaluation of students thereby promoting an inclusive education. This paper studies the role of ICT as a catalyst to change in the teaching learning process from the teachers' perspectives on using ICT tools in teaching, what are the factors that teachers encountered during ICT utilization in teaching and learning, and teachers' perceptions of their own performance.

Numerous studies have shown that integration ICT in education improves the educational quality (Vajargah and Saadattlab, 2014; Ghavifekr and Sani ,2015; Deebom and Zite, 2016). This study provides teachers' perception and perceived barriers to the use of technology tools in classroom's teaching and learning process. This is due to the fact that the majority of previous study of a comparable nature was carried out using a variety of ways and procedures, in a variety of nations, and at different times. Therefore, the main objectives of this study to assessed teachers ' attitude toward use ICT tools in teaching and learning purposes in Northern Cyprus Secondary Schools are as follow:

1. To identify secondary school teachers perceive the use of ICT tools in the teaching process.

2. To determine that what factors and barriers did teachers face when using ICT in teaching.
3. To identify secondary school teachers perceive the use of ICT tools in learning.

Literature review:

The education sector currently uses a lot of information communication technology (ICT), which is made up of personal computers and electronic devices that broadcast information on radio, television, and projectors (Fu, 2013). ICT is an electronic platform for information gathering, handling, storing, and sharing. ICT use in the classroom for instructional and learning purposes serves a variety of purposes. It offers possibilities for educators and learners to work with, remember, change, and retrieve information. Additionally, it encourages students to practice learning actively and independently.

ICT integration in the classroom will have a significant positive impact on teachers' and students' continued growth in terms of their attitudes, aptitudes, and ICT-use skills. It is reasonable to believe that the use of technological instruments and gadgets can help in learning any subject more effectively, including languages, science, math, arts and humanities (Ghavifekr & Sani, 2015).

ICT makes it possible for learning to occur anywhere and at any time. Education is easily accessible online at any time of day thanks to today's fast-paced lifestyle and flexible schedules. Online study materials are available to students around-the-clock, seven days a week, for those looking to expand on their current knowledge or begin learning something new in preparation for a career change. Teachers can have discussions with participants in different places with the help of ICT. With the advancement of ICT, books and printed course materials are no longer the only resources used in teaching and learning. ICT makes a vast array of resources readily available and easily accessible. Furthermore, one could argue that audiovisual presentations, including videos, are a better way to learn (Fu, 2013).

ICT benefits students by allowing them to have access to a wider range of resources and a more flexible curriculum. They gain a lot from the interactive exercises in the lesson that are meant to stimulate and support their comprehension of the material. ICT is also helpful to teachers when they are developing engaging lesson plans that will capture students' interest and help them concentrate. It is almost certain that ICT will outperform students in interactive learning. The education system, policies, and planning in schools can be improved with the help of ICT-based teaching. There should be effective collaboration between the policymakers and researchers and share similar perspectives about the use of ICT in education Ghavifekr and Rosdy (2015).

Three parallel movements in the actual application of ICT in the classroom can be observed as it becomes increasingly integrated into formal education. The majority of ICT-based teaching and learning interactions can benefit from the following interconnected trends: technology increases productivity, is easily modified, and connects a huge number of people with a wealth of information. The efficiency that can be attained is one of the most

beneficial benefits of ICT in education. For example, changes and updates to the materials can be made fairly quickly when using digital teaching resources. This can help to save important time and effort that could be used to improve other aspects of the teacher's pedagogical development, for example. ICT promotes students' interest even more when they use ICT in the classroom for the first time. However, it is argued that ICT use does not have any effect on teacher-student interactions. Without utilizing ICT, it is probably safe to say that teachers teach in the same way they always teach. This approach may not have any significant problems, but it does not fully utilize ICT in terms of creativity and novel teaching-learning approaches. Moreover, learning outcomes will probably stay the same and under the teacher's control rather than promoting autonomous learning if teaching and learning do not alter (Cheah & Lim, 2016).

Although there are countless benefits of using ICT, there is no denying that it diminishes the role of the teacher. The primary source of skills and knowledge is no longer the teacher as a result of the integration of ICT in the classroom. With the help of the World Wide Web, students can easily access online courses, interact with other students and teachers in virtual communities, and reduce their dependency on traditional classroom settings. Real learning can occur when these newly acquired skills and knowledge support and enhance what is taught in the classroom, enabling students to grasp concepts at a deeper level (Cheah & Lim, 2016).

Several studies have demonstrated the effects of ICTs on students' performance and attitudes toward learning strategies. According to more assertions, using ICT in the classroom appropriately can have a major positive impact on students' attitudes and academic performance. Studies have demonstrated that ICT use can support the standard development of content and pedagogy, which is the main topic of discussion in today's education circles (Prasad et al, 2015).

Mudzimiri (2012) drew attention to the fact that there are two types of ICT adoption in pedagogy: productive adoption and cognitive adoption. Technology-enhanced learning is achieved through the use of ICT tools in the productive areas. Examples of these tools include word processors, databases, PowerPoint presentations, and other rich media. While technology can be used to accomplish tasks that require mental travel, it can also be adopted in the cognitive domain when used as a conduit. For instance, adding multiple media discussions to the learning process can encourage teachers to teach concepts that seem too confusing or arise naturally and cannot be demonstrated in traditional classroom settings. Manipulative virtual environments are used in order to explore numerical patterns, simulate tasks that would be challenging to perform with the brain, and discuss non-whole numbers.

According to Abik and Ajhoun (2012), integrating ICT into assimilation strategies has revealed fresh learning opportunities and trends that have served as a conduit for interaction and the dissemination of educational goal contents. However, there will not be any excellent or noteworthy results if education and objective content are not properly

included and integrated. For optimal assimilation outcomes, ICT should therefore be viewed in conjunction with education and objective content.

ICTs have the potential to enhance education in a number of ways. First of all, students might be more motivated to learn more if they are more engaged and interested in the material. Second, instead of receiving instruction with few resources, students can do more independent research and learning because they have access to much information. Thirdly, efforts are made to develop and enhance teacher's preparation. ICTs are also adaptable tools that can promote the shift from an environment focused on teachers to one that is focused on the learner. Instead of enhancing the methods that educators and students always use, ICTs particularly gadgets like computers and web-based application paves the way for more contemporary approaches to teaching and learning. ICT has a significant impact not only on the knowledge that students should acquire, but also on how they should acquire it. The curriculum's emphasis has shifted from content to performance, and teaching strategies have changed from being teacher-centered to being student-centered. ICT unquestionably inspires and motivates people to learn on their own. Video clips, TV news, documentaries, and multimedia computer software are examples of ICTs that can be used to create engaging and up-to-date content that engages students in the learning process. Additionally, interactive radio can be utilized as a teaching tool to get students to tune in and participate more fully in the class. The participants mentioned that this teaching style is more motivating for children than a traditional directive lecture. The parents believed that this teaching method was far more advantageous than the teacher-centered, repetitive, and boring classroom setting. In this method, the teacher only imparts knowledge at a higher level and students merely listen to him or her without engaging in conversation or interaction (Adu & Olatundun, 2013).

ICT changes how we teach and learn by bringing real-world elements into the classroom, including virtual environments that help students understand a particular subject. ICT is a very effective tool for accomplishing the learning objectives. It is challenging to envision learning environments in the future without information and communication technologies (ICT) supporting and assisting them (Adu & Olatundun, 2013).

Numerous authors have attempted to investigate the impact of specific teacher qualities on the use of ICT. The function of ICT integration in the classroom is greatly influenced by a number of individual teacher characteristics, including gender, age, educational background, and experience teaching (Basargekar & Singhavi, 2017). According to (Sahay, 2018), the study examined the attitudes, knowledge, choices, and ICT usage by teachers. The study indicates that in order to guarantee the successful integration of ICT in the classroom, educators must concentrate on rapidly expanding their knowledge and skill sets. In a related study, Deebom and Zite (2016) examined the usefulness of ICT in teaching and learning. They discovered that while there are many ICT tools and resources available in schools, they are not well-suited for the delivery of instruction. The inquiry also identified several restrictions on the proper use of ICT for instructional purposes in schools. These

constraints include a lack of competent teachers, network outages, and the expensive price of ICT resources.

Methodology:

With a focus on the effectiveness of ICT on teaching and learning in secondary schools in Northern Cyprus, this section aims to examine various research practices that are used to conduct this study. It does so through an in-depth analysis, discussions of the sampling technique, and data analysis.

Research description:

The use of quantitative research, which is typically done for deductive research goals, is the main emphasis of this study. For this study, a descriptive survey design would be used. The goal of surveys and descriptive designs is to methodically outline the details and traits of a particular phenomenon as well as the connections between it and other events. These designs are compiled and portrayed as "quantitative" since the focus is on quantity and the outcomes are typically given as numbers (Sharan & Elizabeth, 2016).

The primary research method for this study was a survey. Surveys and questionnaires, according to Creswell (2017), are quantitative research tools that are administered to a sample, which is a small group of people who represent the intended majority. The survey's goal is to discover the patterns of attitudes, opinions, behaviors, or characteristics among a population, which is a large group of people. Closed-ended questions, according to Nicholas (2010), require participants to choose from a predetermined list of answers. These are easier to understand, respond to, and do not require any special writing abilities from the participant. In quantitative approaches that use more closed-ended questions, the researcher identifies response categories such as strongly agree, strongly disagree, and so on (Creswell, 2017). The questionnaire used in this study was based on a study by Ghavifekr and Rosdy (2015).

The participants were given the questionnaires to fill out in order to collect the data of the study. The questionnaire was divided into three sections: demographic information about teachers (gender, age, and years of experience); 15 structured items (items 1–10 related to teachers' perspectives on using ICT tools in teaching; items 11–15 related to the barriers that teachers encountered during ICT utilization in teaching and learning); and 10 structured items (items related to teachers' perceptions of their own performance). The questionnaire used a Likert scale with four possible responses to validate the respondents' responses: Strongly Agreed, Agreed, Strongly Disagreed, and Disagreed. The participants in the current study are secondary school teachers in Northern Cyprus during the fall semester, 2017-2018. The study included 182 teachers from 9 secondary schools in Northern Cyprus.

Table 1 below presents the demographic and professional background of respondents who participated in this research.

Table 1: Audience Profile (n=182)

	Frequency	Percentage(%)
Gender		
Male	68	37.4
Female	114	62.6
	182	100%
Age		
25-30	15	8.2
31-35	28	15.4
36 or above	139	76.4
	182	100%
Teaching Experience		
Less than 1 year	3	1.6
1-5	20	11
6-10	19	10.4
More than 10 years	140	77
	182	100%

As shown in Table 1, the participants are 182: 68 of them are male; while 114 are female. In regards to their age, 15 of them are between the ages of 25 to 30, while 28 were between the ages of 31 to 35 and 139 are more than 36 years of age. As for teaching experience, the majority of respondents (140) have more than 10 years of experience in teaching field. Moreover, only three respondents have less than one year of teaching experience, while 20 of them affirmed to have 1 to 5 years of experience, 19 have between 6 to 10 years of experience in teaching.

Data collection tools:

A quantitative research method and a questionnaire are used to collect data from secondary school teachers in Northern Cyprus. A questionnaire, according to Creswell (2017), is a form that study participants fill out and return to the researcher. The instrument was checked for its validity by experts from EMU. Moreover, the questionnaire was checked for its reliability through the Cronbach's coefficient alpha. Table 2 presents the results of Cronbach's coefficient alpha of the questionnaire.

Table 2. Cronbach's reliability test.

Topics	Cronbach's alpha	No. of Items
Teachers' perspectives on the use of ICT in the classroom.	0.84	25

The Cronbach's alpha score is 0.84, indicating that the questionnaire is highly reliable. The work of Ghavifekr et al. (2015) served as the basis for the coefficient alpha reliability test that the researchers created for the investigation. After analyzing the data for 25 questionnaire items, the researchers determined that the average alpha value was (= 0.70).

Data analysis:

Data analysis and computation are done using the questionnaire responses. The data was analyzed using descriptive statistics via SPSS (Statistical Package for the Social Sciences, version 23). The descriptive analysis aims to provide answers to the research questions. The analysis includes the mean and percentage of teachers' responses.

Findings and discussion:

This section presents the results of the data obtained through the questionnaire. The study explores the level of ICT use in teaching and learning. It also identifies the factors and obstacles that impede the use of ICT in education in secondary schools in Northern Cyprus.

Criteria select for analysis

The researcher used particular standards to categorize mean.

Table 3. The standards that are used to categorize the means.

Rang	Level	Attitude of teachers
1.99 or less	Low	Negative
2 - 2.99	Moderate	Moderate
3 or more	High	Positive

To identify secondary school teachers perceive the use of ICT tools in the teaching process.

The results of teacher perspective in the use of ICT in teaching are presented in this section. The items evaluate teachers' attitudes towards the use of ICT in the classroom. Table 3 displays whether the secondary school teachers' attitude to the items is positive or negative.

Table 4. Teacher's Perception of ICT Integration with regard to Q1.

Q1. I feel confident learning new computer skills.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
76	41.7	82	45.1	15	8.2	9	4.9	3.24	.80	High

It can be observed, from Table 4, that 87% of the participants “strongly agreed” or “agreed” that “feeling confident about learning new computer skills”, while 5% were unsure about this item. However, 8% of respondents reported that “they are not confident about learning new computer skills for teaching”. The mean score for teachers' familiarity and proficiency with ICT was 3.24, indicating that most teachers feel comfortable acquiring new computer skills and using ICT to find resources and teaching materials.

Table 5. Teacher's Perception of ICT Integration with regard to Q2.

Q2. I find it easier to teach by using ICT.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
62	34.1	100	54.9	16	8.8	4	2.2	3.21	.69	High

Table 5 shows that 89% of the teachers “strongly agreed” or “agreed” that “using ICT tools makes teaching easier”. 9% of respondents “disagreed” and 2% “strongly disagreed” that “using ICT tools makes teaching easier”. With a total mean of 3.21.

Table 6. Teacher's Perception of ICT Integration with regard to Q3.

Q3. I am aware of the great opportunities that ICT offers for effective teaching.										
SA		A		D		SD		Mean	Std. Level	Dev
N	%	N	%	N	%	N	%			
77	42.3	98	53.8	4	2.2	3	1.6	3.37	.61	High

Table 6 shows that 96% of the teachers “strongly agreed” or “agreed” that “they were aware of the numerous opportunities that ICT provides for effective teaching”, while 2% “strongly disagreed”. 2% of the respondents said they “are unaware of the enormous opportunities for effective teaching that ICT provides”.

Table 7. Teacher's Perception of ICT Integration with regard to Q4.

Q4. I think that ICT supported teaching makes learning more effective.										
SA		A		D		SD		Mean	Std. Level	Dev
N	%	N	%	N	%	N	%			
72	39.5	90	49.5	16	8.8	3	1.6	3.28	.69	High

Table 7 illustrated that 89% of the teachers “agreed” or “strongly agreed” that “using ICT in the classroom improves learning outcomes”. 9% of the participants “disagreed” about this item, while 2% undecided. With a mean score of 3.28, this section demonstrates that the majority of teachers agreed that using ICT improves the effectiveness of their instruction.

Table 8. Teacher's Perception of ICT Integration with regard to Q5.

Q5. The use of ICT helps teachers to improve teaching with more updated materials.										
SA		A		D		SD		Mean	Std. Level	Dev
N	%	N	%	N	%	N	%			
87	47.8	85	46.7	6	3.3	4	2.2	3.40	.66	High

Table 8 illustrated that 95% of the teachers “agreed” or “strongly agreed” that “the use of ICT assisted teaching and encourages teachers to improve their own teaching skills with ongoing development materials”, while 2% were undecided and 3% disagreed. With a total mean of 3.40.

Table 9. Teacher's Perception of ICT Integration with regard to Q6.

Q6. I think the use of ICT improves the quality of teaching.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
82	45	87	47.8	9	4.9	4	2.2	3.36	.68	High

Table 9 shows that 93% of the teachers “agreed” or “strongly agreed” that “using ICT improves teaching quality”, while 2% “strongly disagreed” and 5% “disagreed”. ICT use improves instructional quality, with a total mean of 3.36.

Table 10. Teacher's Perception of ICT Integration with regard to Q7.

Q7. I think the use of ICT helps to prepare teaching resources and materials.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
88	48.4	83	45.6	7	3.8	4	2.2	3.40	.67	High

Table 10 demonstrated that 94% of the teachers “strongly agreed” that “using ICT to prepare teaching resources and materials is beneficial”. However, 2% of teachers continue to “strongly disagreed”, and 4% “disagreed” that “using ICT to prepare teaching resources and materials is beneficial”. Similarly, the overall mean score was 3.40.

Table 11. Teacher's Perception of ICT Integration with regard to Q8

Q8. The use of ICT enables the students' to be more active and engaging in the lesson.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
68	37.4	91	50.	19	10.4	4	2.2	3.23	.72	High

Table 11 shows that 87% of the teachers “strongly agreed” and “agreed” that “using ICT helps students participate more in the lesson”, while 2% “strongly disagreed” and 10% “disagreed”. This section revealed that using ICT tools in the classroom has improved the quality of instruction while also assisting teachers in developing engaging lesson plans that will capture students' interest, with a total mean score of 3.23.

Table 12. Teacher's Perception of ICT Integration with regard to Q9

Q9. I have more time to cater to students' need if ICT is used in teaching.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
50	27.5	87	47.8	35	19.2	10	5.5	2.97	.83	Moderate

According to Table 12, 75% of the teachers “strongly agreed” or “agreed” that “using ICT for teaching gives them more time to create lessons and materials that are tailored to students' needs”.

Table 13. Teacher's Perception of ICT Integration with regard to Q10

Q10. I can still have an effective teaching without the use of ICT.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
27	14.8	88	48.4	52	28.6	15	8.2	2.70	.82	Moderate

Table 13 presents that 63% of the teachers “strongly agreed” or “agreed” that “they could still deliver an effective lesson even if they did not use ICT tools”. However, 8% “strongly disagreed” and 29% of the respondents “disagreed” that “they could still provide effective instruction without using ICT tools in the classroom”.

To determine that what factors and barriers did teachers face when using ICT in teaching.

Table 14. Teacher's Perception of ICT Integration with regard to Q11

Q11. I think the use of ICT in teaching is a waste of time.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
4	2.2	12	6.6	98	53.8	68	37.4	1.74	.68	Low

According to Table 14, 91% of the teachers “strongly disagreed” or “disagreed” that “using ICT in the classroom wastes time”, compared to 2% “strongly agreed” and 7% “agreed” that “using ICT in the classroom wastes time”. With a mean score of 1.74, the

majority of teachers believe that incorporating ICT into the classroom benefits both teaching and learning.

Table 15. Teacher's Perception of ICT Integration with regard to Q12

Q12. I am confident that my students' learn best without the help of ICT.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
7	3.8	49	26.9	94	51.6	32	17.6	2.17	.76	Moderate

According to Table 15, 69% of the teachers “strongly disagree” and “disagree” that “they are confident that their students will learn more effectively in the classroom without the use of ICT”, compared to 4% “strongly agree” and 27% “agree”. The overall mean score is 2.17.

Table 16. Teacher's Perception of ICT Integration with regard to Q13

Q13. The classroom management is out of control if ICT is used in teaching.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
3	1.6	17	9.3	106	58.2	56	30.8	1.82	.66	Low

According to Table 16, 89% of the teachers “strongly disagreed” or “disagreed” that “the use of ICT in the classroom affects students’ control”, while 2% “strongly agreed” and 9% “agreed”. With a mean score of 1.82, the majority of teachers showed that “the classroom management does not become out of control when ICT is used in the classroom”.

Table 17. Teacher's Perception of ICT Integration with regard to Q14

Q14. Students' pay less attention when ICT is used in teaching.										
SA		A		D		SD		Mean	Std. Level	
N	%	N	%	N	%	N	%		Dev	
5	2.7	12	6.6	105	57.7	60	33	1.79	.68	Low

Table 17 shows that 91% of the teachers “strongly disagreed” and “disagree” that “students pay less attention in the classroom when ICT is used”, while 3% “strongly agreed” and 7% “agreed”. Teachers generally agreed that using ICT in the classroom improves ideas

for engaging students and piquing their interest in the subject matter, and bringing the real world into the classroom.

Table 18. Teacher's Perception of ICT Integration with regard to Q15

Q15. Students' makes no effort for their lesson if ICT is used in teaching.										
SA		A		D		SD		Mean	Std. Dev	Level
N	%	N	%	N	%	N	%			
3	1.6	22	12.1	98	35.8	59	32.4	1.83	.70	Low

Table 18 shows that 86% of the teachers “strongly disagreed” and “disagreed” that “using ICT for educational purposes will cause students to lose interest in their lessons”, while 2% “strongly agreed” and “12% agreed”. The overall mean score is 1.83.

The results of the descriptive analysis of each item are shown in the previous tables. The majority of teachers are enthusiastic about using ICTs effectively for educational purposes. All of the items highlight the advantages of using ICT in education. Items from I1 to I10 back this up. Most notably, a mean score of 2.82 or higher indicates that teachers are likely to agree with the item statements. The maximum mean score for more than 90% of the individual items demonstrates that the participants have a positive attitude towards ICT usage.

The tables above, on the other hand, showed that teachers' use of ICT in the classroom is constrained by the items that appear on the factors with the lowest mean score point. Teachers tend to disagree that using ICTs for teaching purposes is a waste of time, students do not work hard enough on their lessons, classroom management is out of control, and students pay less attention when they have low mean scores on items I11, I12, I13, I14, and I15. The teachers believe that students learn best when they are not assisted by ICT. Individual mean answers for all 5 Items (I11 to I15) are below the average mean score of 2.82, indicating that educators disagree with these constraints on ICT use in the classroom.

To identify secondary school teachers perceive the use of ICT tools in learning.

Table 19. Teacher's Perception of ICT Integration with regard to Q16

Q16. ICT allows students' to be more creative and imaginative.

SA		A		D		SD		Mean	Std. Dev	Level
N	%	N	%	N	%	N	%			
45	24.7	111	61.0	17	9.3	9	4.9	3.05	.73	High

Table 19 demonstrated that 86% of the teachers “strongly agreed” and “agreed” that “ICT allow students to be more creative and imaginative”, while 5% remain indecisive and 9% “disagreed” that ICT allow students to be more creative and imaginative in teaching and learning purposes.

Table 20. Teacher's Perception of ICT Integration with regard to Q17

Q17. The use of ICT helps students to find related knowledge and information for learning.

SA		A		D		SD		Mean	Std. Dev	Level
N	%	N	%	N	%	N	%			
62	34.1	106	58.2	9	4.9	5	2.7	3.23	.66	High

Table 20 shows that 92% of the teachers “strongly agreed” and “agreed” that “the use of ICT assists students to research related knowledge and information for learning”, while about 3% “strongly disagreed” and 5% “disagreed” about this item.

Table 21. Teacher's Perception of ICT Integration with regard to Q18

Q18. The use of ICT encourages students to communicate more with their classmates.

SA		A		D		SD		Mean	Std. Dev	Level
N	%	N	%	N	%	N	%			
33	18.1	88	48.8	53	29.1	8	4.4	2.80	.78	Moderate

Table 21 shows that about 67% of the teachers “strongly agreed” and “agreed” that “the usage of ICT motivates students to communicate with their classmates”, while 4% remain undecided and 29% “disagreed” on this issue.

Table 22. Teacher's Perception of ICT Integration with regard to Q19

Q19. The use of ICT increases students' confidence to participate actively in the class.

SA		A		D		SD		Mean	Std. Level
N	%	N	%	N	%	N	%		
34	18.7	109	59.9	34	18.7	5	2.7	2.95	.69 Moderate

Table 22 shows that 79% of the teachers “strongly agreed” and “agreed” that “the use of ICT increases students’ willingness to actively participate in the class”, while 3% “strongly disagreed” and 19% “disagree” about it.

Table 23. Teacher's Perception of ICT Integration with regard to Q20

Q20. I think students learn more effectively with the use of ICT.

SA		A		D		SD		Mean	Std. Level
N	%	N	%	N	%	N	%		
48	26.4	104	57.1	26	14.3	4	2.2	3.07	.70 High

Table 23 shows that 84% of the teachers “strongly agreed” and “agreed” that “the usage of ICT increase learning in school”, while 2% “strongly disagreed” and 14% “disagreed” about this statement.

Table 24. Teacher's Perception of ICT Integration with regard to Q21

Q21. I think the use of ICT helps to broaden students' knowledge paradigm

SA		A		D		SD		Mean	Std. Level
N	%	N	%	N	%	N	%		
42	23.1	116	63.7	22	12.1	2	1.1	3.08	.62 High

Table 24 displays that 87% of the teachers “strongly agreed” and “agreed” that “the use of ICT assists to increase the knowledge paradigm of students”, while 1% “strongly disagreed” about it, 12% “disagreed” in this statement.

Table 25. Teacher's Perception of ICT Integration with regard to Q22

Q22. I think the use of ICT helps to improve students' ability specifically in reading, writing.

SA		A		D		SD		Mean	Std. Level
N	%	N	%	N	%	N	%		
20	10.9	90	49.4	56	30.7	16	8.7	2.62	.79 Moderate

Table 25 demonstrated that 60% of the teachers “strongly agreed” and “agreed” that “the usage of ICT assists to enhance ability of students, particularly in writing and reading”, while 9% “strongly disagreed” about it, 31% “disagreed” about this item.

Table 26. Teacher's Perception of ICT Integration with regard to Q23

Q23. The students' are more behaved and under control with the use of ICT.

SA		A		D		SD		Mean	Std. Level
N	%	N	%	N	%	N	%		
28	15.4	81	44.5	62	34.1	11	6.0	2.69	.80 Moderate

Table 26 shows that 60% of the teachers “strongly agreed” and “agreed” that “the students are better-behaved with the usage of ICT”, while 6% “strongly disagreed” and 34% “disagreed” about it.

Table 27. Teacher's Perception of ICT Integration with regard to Q24

Q24. The use of ICT enables students' to express their ideas and thoughts better.

SA		A		D		SD		Mean	Std. Level
N	%	N	%	N	%	N	%		
27	14.8	94	51.6	45	24.7	16	8.8	2.72	.82 Moderate

Table 27 presents that 66% of the teachers “strongly agreed” and “agreed” that “the usage of ICT lets students to express their thoughts and ideas in a better way”, while 9% “strongly disagreed” about it, 25% “disagreed” about this item.

Table 28. Teacher's Perception of ICT Integration with regard to Q25

Aya Muhammad IDRIS									
SA		A		D		SD		Mean	Std. Level
N	%	N	%	N	%	N	%		
40	22.0	97	53.3	35	19.2	10	5.5	2.91	.79 Moderate

Table 28 displays that 75% of the teachers “strongly agreed” and “agreed” that “the usage of ICT results in active as well as engaging lesson for students”, while 6% “strongly disagreed” about it, and 19% “disagreed” in this subject.

An important point is that all ten items (from I16 to I25) are higher than half values with an average score of 2.91. This implies that the teachers agreed that ICT helps students learn better in the classroom.

This discussion clearly shows that more than 80% of teachers strongly agreed that ICT is being used effectively for educational purposes and will continue to do so in the future. The teachers' responses reveal a very positive attitude.

Conclusion:

The main objective of this study is to look at the use of ICT in learning and teaching, the effect of ICT use on learning and teaching, and the obstacles that hinder using ICT in the secondary schools in Northern Cyprus. The incorporation of ICT into education entails the use of technology for both teaching and learning, as well as the use of specialized hardware and software. It can be expected that students can learn better in technologically based environments as they are already familiar with technology.

By removing the time barrier for both students and teachers, this study also demonstrated how ICT motivates students to learn new topics outside of the classroom. ICT also improves communication between students and teachers in the classroom, which helps students to learn better. ICT has the advantage of being adaptable. Nowadays, students are aware of the ability to engage in education from any location at their convenient time. Moreover, teachers agree that ICTs allow them to present their teaching skills in more engaging and creative lessons, and that ICT has the potential to raise educational standards.

According to the study's findings, a sizable proportion of respondents are positive about the use of ICT in education. More than 80% of the teachers agreed or strongly agreed that ICT can be used effectively for both teaching and learning. They will eventually use ICT in both teaching and learning. The responses of the teachers demonstrate that they have a very strong positive attitude towards the use of ICT.

The study also discovered inconsistencies between teachers' beliefs and their actual use of technology in the classroom. It is possible that teachers want to advance professionally and use ICT but they do not have the necessary knowledge or access to training. This study determined the major factors that lead to greater impact and successful ICT integration. Despite being one of the most significant challenges identified, 63% of teachers strongly agreed or agreed that they could teach effectively without the use of ICT.

Recommendation:

From the discussion above and the research findings, the following suggestions can be made for upcoming initiatives in the fields of teaching and learning in secondary schools in Northern Cyprus's. Teachers should receive enough training on integrating ICT into teaching and learning, so they can gain the necessary knowledge and abilities.

ICT strategy integration into overall institution strategies, encouraging and rewarding teachers to use it, and transforming positive attitudes toward ICT into effective, widely used practices. Moreover, since ICT is thought to improve teacher-student interaction and tend to increase students' motivation to learn, it should be a part of learning activities that involve using it, such as completing assignments and searching the internet for educational resources.

Further research:

Therefore, for related future studies, larger sample sizes and other instructional levels such as elementary school, secondary school, or any other level of education, should be encouraged to adopt ICT tools for teaching purposes, independent of variables like age, experience, gender, skill, etc., in order to obtain better results.

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