OPINIONS OF THE SECONDARY AND PRIMARY EDUCATION ADMINISTRATORS IN THE TRNC ABOUT THE USE OF TECHNOLOGY

Gaye TÜRKER
Orcid: https://orcid.org/0000-0002-6799-2193
gturker.turker@gmail.com
Atleks Sanverler Ortaokulu, TRNC

Hülya ALTUN
Orcid: https://orcid.org/0000-0003-4507-8269
hulyametti@yahoo.com
Güzelyurt Türk Maarif Koleji, TRNC

ABSTRACT:
The aim of this study is to determine in detail the difficulties experienced by administrators in primary and secondary education institutions affiliated to the Ministry of National Education and Culture in TRNC. regarding technology use tools and to examine the problems and views of principals and assistant principals on this issue.to evaluate, to determine the causes of these problems and possible solutions. The qualitative research method was used in this study. The maximum diversity sampling method was used from purposeful sampling in sampling selection. Based on maximum diversity sampling, different gender, age, seniority, branch, education level etc. Participants of the research were determined by paying attention to such features. The working group consists of 47 people. This study consists of 15 Principals, 15 Assistant Principals in primary education, 5 Principals and 12 Assistant Principals in Secondary Schools working in primary and secondary schools in Nicosia region. Semi-structured interview forms were used as data collection tools. The data were analyzed with a descriptive analysis method and presented within the framework of determined themes. Findings revealed, determining the problems they experienced (Lack of knowledge, financial difficulties, lack of repair unit of the ministry, in-service insufficiency of training, insufficient internet infrastructure, fear of spoiling the relevant tools, not every school having equal opportunities etc.). Another result of the study is the widespread use of technology usage tools. Since the facilities of the school are limited, the participants expressed the view that this can only be done by finding sponsor companies and donating technological tools to the school. The use of technological tools in the field of education is one of the conditions of the modern education system. Besides, another result that came out of the interview forums was that the participants firstly followed the technology and developed themselves and set an example for other teachers by their leadership qualities.
Keywords: Training manager, technology, technological tools, in-service training

INTRODUCTION

In today's world where knowledge and technology are increasing day by day, understanding in education also changes in parallel with these. Developments and changes in world education should be followed in TRNC. Thanks to technological tools that administrators can use efficiently, schools can be brought to a more modern level and the quality of education can be increased.

The concept of technology is a concept that started to be studied in ancient times. As the word meaning technology uses tools and equipment, application knowledge covering their usage patterns is defined as the science of application. (TDK, 2020). Technology is a phenomenon that is effective in enriching education-training environments in which determined skills and interests are developed (İşman, 2008).

Education systems have undoubtedly played a major role in ensuring technological change. To perform this role, their educational activities are required to efficiently utilize technology (Alkan, 1997).

According to McDermott; technology in a concrete and empirical sense is a small group of technically competent people, with the help of an organized hierarchy, to gain control over the rest of the whole (people, events, machines, etc.) (McDermott, 1981: 142).

In addition to being important in human life, technology has also gained great importance on education. The concept of technology in terms of education is explained with the following definitions:

All methods and techniques applied to educational principles constitute educational technology. (Cleary, 1976). It is the functional structuring of learning or training processes by employing relevant knowledge and skills to

dominate education and learning situations. With the development of information technologies, education systems and educational activities in educational environments are also affected (Pala, 2006).

School administrators have to lead their teachers about technology. G. Valdez defines technological leadership as a combination of strategies and techniques that require technology-specific attention, encompassing an understanding of how technology can be developed in teaching practices and strategies to help teachers use technology in their classroom. (Valdez, 2004)

The school administrator is one of the most important elements that play a role in the effective use of information technologies in school and the learning-teaching process in this context. In terms of effective use of technology in school, teaching-learning process, management and support systems, evaluation system necessitates having a new perspective on many issues in social and moral aspects (Şeyhoğlu, 2005).

When we look at similar studies in the literature, M.Yılmaz, and A. Pala, examined the effect of teachers and administrators' having personal computers and Internet access on their computer self-efficacy beliefs and attitudes towards computer-assisted teaching in their studies. (Yılmaz,2016; Pala, 2006)

Education systems are expected to raise modern individuals who are technology literate and keep up with the information age. Recently, one of the issues that have come to the agenda is that teachers and administrators are expected to increase their ability to use new technologies by the information society. In the light of all these developments, individuals who are trained in educational institutions should have access to today's technology and know how to use it effectively. (Seferoğlu, 2009)

Turkey and Turkish Republic of Northern Cyprus Universities did not reveal any research related to information management in universities. It has been observed that information management systems are studied in very few primary and secondary education institutions and the current situation has been tried to be revealed. According to the research of Muratoğlu and Özmen among these studies, it has concluded that school administrators and teachers do not effectively implement knowledge management in schools, that making comparisons and forming an information team in schools is not done effectively, and that there is no serious information store and knowledge bank in schools to reach the desired information instantly (Muratoğlu & Özmen, 2005).

Knowledge management has to be designed as an organizational process and constantly improved. This process has made knowledge management a necessity for all kinds of contemporary organizations. (Daglı, Silman & Birol, 2009)

Today's administrators are expected to know themselves while managing the school, to identify their strengths and weaknesses, to reflect on them and to have the skills to produce solutions to problems by doing the necessary studies. (Keman, 2019)

According to Görgülü & all, it is important in terms of determining the variables that affect the school administrators' receiving and using education about information technologies and developing solutions for them (Görgülü, Küçükali & Ada, 2016).

When M.Yılmaz, (2016) Pala, A. (2006) and Çetin & Güngör (2014) examined the effect of teachers and administrators' having a personal computer and Internet access on their computer self-efficacy beliefs and their attitudes towards computer-assisted teaching. It is seen that both the self-efficacy beliefs and attitudes of having a personal computer and internet access affect the use of technology tools positively.

The study is presented by using sub-problems to determine in detail the difficulties of the administrators in the primary and secondary education in TRNC Public Schools in using Technology Tools and to show possible solutions.

- What are the in-service training problems in the TRNC education system?
- What are the infrastructural problems in education and training in the TRNC education system?
- What are the problems of a lack of technical support in the TRNC education system?
- Financial difficulties in the TRNC education system?
- How can it be ensured that the use of technology tools of TRNC Administrators are popularized?

METHOD

The working group (Participants)

Qualitative research techniques were used to examine the subject in more detail.While concluding qualitative research, he examines it in general. The working group consisted of 47 people. The problems determined in line with the data analyzed with the descriptive analysis method, sub-problems were identified and shown.

The data obtained according to the descriptive analysis approach are summarized according to predetermined themes. The data were analyzed considering the questions used in the interview and presented in the findings section.

The maximum diversity sampling method was used from purposeful sampling in sampling selection. Based on maximum diversity sampling, different gender, age, seniority, branch, education level etc. Participants of the study were determined by paying attention to such features.

The purpose of maximum diversity sampling is to reflect the diversity of the participants who may be a party to the problem being studied. Because of this reason the demographic information asked the participants is shown in Table 1.

DATA COLLECTION TOOL

In this study, the interview form was sent to 15 primary school principals and 15 primary school assistant principals in Nicosia central schools and 5 principals in secondary schools and 12 assistant principals in Nicosia central schools via e-mail and received. The results obtained according to the answers given by the participants were grouped under certain headings and analyzed with Microsoft Excel program. (Table 1)

VALIDITY

The collected data are written in detail and the results are explained in a clear and understandable way. In this context, teachers' opinions expressed with direct quotations were explained accordingly. Thus, the validity study of the study was conducted. Findings in the research constitute a coherent, meaningful and whole. Because of this reason the findings obtained are compatible with the conceptual framework.The researcher who conducted the study constantly questioned themselves and their research processes with a critical eye; checked whether the findings and the results of these findings reflect the reality (Yıldırım & Şimşek, 2005).

In this study, "semi-structured interview" technique was used as a data collection method. Interview forms were sent to 47 participants from different schools in the Nicosia region. The data collected in the Interview form with 5 questions were written in detail and transferred to an Excel table (Table 4.). The validity check was also made by explaining how the results were reached clearly and understandably.

RELIABILITY

The researcher avoided directing the interviewed participants and tried to make the teachers speak in line with the subject and purpose of the study. Since the data are stored so that they can be examined by others, other researchers who conduct similar research can take into account the data defined by the individuals who are the data sources while creating samples.

In this study, the collected data were analyzed using the descriptive analysis technique and the findings obtained were summarized according to predetermined themes. The data were analyzed considering the questions used in the interview and presented in the findings section. Participants were asked about their demographic information in the interview form to identify the defects in the TRNC education system. These are information such as gender, age, seniority, education level, and branch. This information was transferred to the Excel program and analyzed. The results are shown in Table 1, Table 2, Table 3, Table 4.

For reliability, the data is kept in an Excel table so that the data can be viewed by anyone. A few examples of the questions in the interview form are shown in the findings section (Table 1).

The interview form prepared by the researcher consists primarily of one curriculum development specialist, one education management expert, one Turkish language expert and one assessment-evaluation expert.

COLLECTION OF DATA

The interviews were held in Nicosia, between September and January in the 2019-2020 academic year. The opinions of 27 Assistant Principals and 20 Principals from different schools were requested. For this purpose, the interview form containing 7 questions we have collected under 3 headings above was sent to the relevant participants by mail.

In the interview forms, managers were asked to indicate the technological tools they use as well as their demographic information. Participants were asked which tools and equipment they could use such as a desktop computer, portable computer, tablet computer, camera, printer, smartboard, projector, smartphone, internet. These tools are the most basic modern training tools used in education. These and similar tools are necessary to provide quality education.

DATA ANALYSIS

In this study, the data were analyzed by considering the questions used in the interview and presented in the findings section. The form on questions were sent to the relevant participants by email through interview forms and the results were also received back by mail. The results obtained according to the answers given by the participants were grouped under certain headings and analyzed with Microsoft Excel program. All tables are in the Findings section

FINDINGS AND COMMENTS

Views of 47 administrators from different schools were requested. For this purpose, an interview form including 5 questions that we have gathered under 4 headings below has been prepared. Few of the questions in the interview form were shown in Table 4. Findings from the study were grouped according to interview questions under 4 main themes.

Table 1. Information About School Administrators

			n	%
School Type		Kindergarten	10	21.3
		Primary School	20	42.6
		Secondary School	17	36.2
Education Level		Undergraduate	28	59.6
		Master's degree	14	29.8
		PhD	5	10.6
Occupational Seniority		<15	19	40.4
		>15	28	59.6
Gender	Female	<40	7	14.9
		>40	21	44.7
	Male	<40	5	10.6
		>40	14	29.8
Total			47	100

When Table 1. was examined. the majority of the administrators out of the 47 people who participated in the interview were working in primary school (n = 20; p = 42.6%). We see that the education level of most of the managers remained at the undergraduate level (n = 28; p = 59.6%). It is seen that the number of doctorate managers is very low. (n = 5; p = 10.6%). It was observed that most of the administrators were women and over the age of 40 (n = 21; p = 44.7%). However, in the data obtained from the interview forms, it was observed that men over the age of 40 were in the minority (n = 5; p = 10.6%). It has been observed that the professional seniority (staff year) of the managers is mostly over 15 years (n = 28; p = 59.6%). When we correlate the data in Table 2. it is seen that women over the age of 40 use more technology.

Table 2. Use of Technological Tools by Managers

Technological Tools	Number of users	%
Smartphone	47	100.0
Internet	47	100.0
Desktop	47	100.0
Printer/Scanner	47	100.0

Laptop	15	31.9
Camera	13	27.7
Smart Board	7	14.9
Tablet PC	5	10.6
Projection	5	10.6
Smartschool Education Portal	28	59.6
MEB Education Portal	19	40.4
EDMS (Electronic Document Management System)	20	42.6

Difficulties experienced by the administrators in the use of technological tools in the TRNC, the responses of the relevant participants. All participants can use Smartphone, Desktop PC, Printer and Scanner (n=47, p=100) but it is difficult to use tablet PC and projection for them (n=47, p=100).

Table3: Problems experienced by administrators in educational institutions while using technological tools

Problems Experienced	n	%
Lack of in-service training	21	44.7
Ministry's lack of technical support	10	21.3
Inadequate internet infrastructure	7	14.9
Financial impossibilities	7	14.9
The necessity of expanding the use of technological tools	2	4.3
Total:	47	

When Table 3 was examined, it was seen that the most desired problem to be solved is inadequate in-service training opportunities (n = 21; p = 44.7%). Participants suggested the Ministry's lack of technical support and increasing the quality of in-service training (n = 10; p = 21.3%). Internet infrastructure and financial problems are the third major problems (n = 7; p = 14.9%). It was observed that the least desired problem is “expanding the use of technological tools” (n = 2; p = 4.3%).

Table 4. Interview Questions Asked To Managers

INTERVIEW QUESTIONS
1. Can you follow the ever-evolving technology that interests you in the field of education? What are the problems?
2. What technological tools do you use in your school?
3. What are the problems you have with the technological tools you use?
4. Have you attended any courses, seminars on the use of technological tools? Was it helpful? Your feedback.
5. What are your suggestions for popularizing technology use tools and minimizing problems?

HOW IS IT ENABLED TO DISSEMINATE THE TECHNOLOGY USAGE TOOLS OF TRNC MANAGERS?

According to the opinions of the administrators working in the primary and secondary schools in the Nicosia centre under the TRNC Ministry of National Education, the technology use tools and the difficulties they have experienced in the evaluation form, the administrators are behind the educational-personal progress. They do not follow technological developments sufficiently. Unfortunately, some teachers working in primary and secondary
schools in Nicosia center under the TRNC Ministry of Education are not innovative enough. Other problems are lack of in-service training, financial difficulties, the ministry's failure to send sufficient technological tools. It shows that among the participants of the study, who are women and whose seniority years are over 15, are more

curious about the use of technological tools. It shows that he follows in-service training. Also, looking at the managers, it is observed that the young generation managers can use technological tools more easily.

CAN IT FOLLOW THE CONTINUOUS DEVELOPING TECHNOLOGY RELATED TO THE MANAGERS 'USE OF TECHNOLOGICAL TOOLS IN THE TRNC, AND TAKE IN-SERVICE COURSES ON THIS SITE?

Among the responses given by the interviewees, the administrators did not follow the ever-developing technology, the Ministry of National Education did not open the necessary in-service courses, and some emphasized that the administrators did not find time due to the workload and some of them stated that the young people should now attend the courses as there is only a little time left for their retirement.

CONCLUSION & RECOMMENDATION

- According to the findings obtained from the interviews, it is up to the Ministry of National Education to solve the problems of the administrators working in the schools where the research was conducted regarding the use of technology use tools.
- The Ministry has to provide internet infrastructure and technological tools to every school under equal conditions.
- It is the direction of the administrators to follow technology, develop themselves and set an example for other teachers by their leadership qualities.
- It shows that women and those with seniority of over 15 years are more curious about the use of technological tools.

SUGGESTIONS

- TRNC Ministry of National Education And Culture administrators should plan in-service training courses regarding the use of technological tools that will not leave them behind technology and meet their demands and needs.
- In case the TRNC Ministry of National Education And Culture and the school's facilities are not sufficient, financial support should be provided for the purchase of technological tools from the school family association or sponsor companies.

REFERENCES

Alkan, C. (1997). Eğitim Teknolojisi. Ankara: Anı Yayıncılık.

Başaran, İ. E. (1992). Yönetimde insan ilişkileri: Yönetsel davranış. Ankara: Gül Yayınevi.

Cleary, A. (1976). Education Technology: implications for Early and Special Education. New York: John Wiley.

Dağli, G., Silman, F., & Birol, C. (2009). Üniversite Yöneticilerinin Bilgi Yönetimi Araçlarını Kullanma Yeterlilikleri ile İlgili Nitel Bir Araştırma (KKTC Örneği). 9(3), 1237–1290.

Görgülü, D., Küçükali R., & Ada, Ş. (2016). "Okul Yöneticilerinin Bilgi Teknolojileri İle İlgili Eğitimleri Alma ve Kullanma Durumlarının İncelenmesi." Mehmet Akif Ersoy Üniversitesi Eğitim Bilimleri Enstitüsü Dergisi 2(3):1–20.

İşman, A. (2008). Öğretim Teknolojileri ve Materyal Tasarımı. Ankara: Pegema Yayıncılık.

Kadı, İ. (1998). Bilgisayar Destekli Tasarım Modelleme Analiz. Ankara: Gazi Kitabevi.

Keman, F. Y. (2019). "Göreve Yeni Başlayan Okul Yöneticilerinin Karşilaştiklari Sorunlar ve Çözüm Önerileri."

McDermott, J. (1981).Technology: The Opiate of the Intellectuals. In A. H. Teich (Ed.), Technology and Man's Future (New York: St. Martin's Press.

Muhammet Yılmaz, (2016). İlkokul öğretmenlerinin eğitimde teknoloji kullanımına ilişkin bilgisayar yeterliliklerinin ve teknoloji tutumlarinin değerlendirilmesi, Yüksek Lisans Tezi, Eğitim Bilimleri Enstitüsü, Mersin Üniversitesi

Muratoğlu, V., & Özmen, F. (y.y.). Eğitim Örgütlerinde Bilgi Yönetimi Stratejileri- Yaş Ve Okul Türü Değişkenlerine Göre Eğitimci Görüşleri (Tunceli İli Örneği).

Ozdamlı, F. ve Uzunboylu, H. (2014). M-learning Adequacy and Perceptions of Students and Teachers in Secondary Schools. British Journal of Education Technology, 46(1), 159-172.

Pala, A. (2006). İlköğretim birinci kademe öğretmenlerinin eğitim teknolojilerine yönelik tutumları. Sosyal Bilimler Dergisi, 16, 177-188

Seferoğlu, S. S. (2009), İlköğretim Okullarında Teknoloji Kullanımı ve Yöneticilerin Bakış Açıları, Akademik Bilişim 2009 Harran Üniversitesi, Şanlıurfa, 11-13 Şubat 2009

Şeyhoğlu, M. (2005). Öğretmenlerin ve Yöneticilerin Bilgisayar Kaygı Düzeyleri. Yüksek Lisans Tezi, Hacettepe Üniversitesi, Ankara.

TDK, (2020). Türk Dil Kurumu. 20 Temmuz 2020 tarihinde http://www.tdk.com.tr adresinden erişilmiştir.

Valdez, G. (2004). Critical issue: Technology leadership: Enhancing positive educational change.http://www.ncrel.org/sdrs/areas/issues/educatrs/leadrshp/le700.htm

Yıldırım, A. & Şimşek, H. (2005). Sosyal Bilimlerde Nitel Araştırma Yöntemleri. Seçkin Yayıncılık.

