

Evaluation of Technology Leadership in the Context of Vocational School Administrators

Timuçin Özkan, Aytaç Tokel, Mahmut Çelik and Behcet Öznacar
Faculty of Education Educational Sciences Institute, Near East University, Nicosia, Cyprus

Keywords: Manager, Technology Leadership, Education.

Abstract: Technology can become increasingly important in reaching its educational goals. Person in charge of administrative duties in school carry out and display leadership qualities in the school. This study was carried out with the aim of assessing what the opinions of the vocational school administrators about the profile leadership are. Semi-structured interview questions are used to increase the reliability of the work. This study was carried out qualitatively by using face to face interview technique with the administrators of 5 vocational schools randomly selected from 13 vocational schools. In order to allow the duplication of the work, it has been analyzed through content analysis with emphasis on creating predetermined questions. In the study, the qualitative-managerial case study was utilized in order that school administrators can understand what their views on technology leadership are and how useful they find their own institutions. As a result of the various findings, it has been revealed that the leadership of the school administrators participating in the research is influenced by the technology leadership in the development of the teaching and the skills of the students, and that their individual and professional developments can also be executed positively with the planned in-service courses.

1 INTRODUCTION

One of the biggest factors in the development of societies is technology. Technology has many descriptions in the literature. Technology is an art, in this production, in the service sector, in transport, in science, and so on. According to Kaya (2005), science uses human beings in the real sense of discipline of science in order to gain superiority to nature.

The dimensions of information, speed and method of accessing information are also changing within the developments in technology. In this process, it is important to train individuals who have the ability to effectively use the knowledge that education and training institutions have access to provide. School administrators have great responsibilities and duties for the widespread use of technology.

The fact that being a good educational leader is not enough alone. School administrators need to define and use technology, and most importantly, to internalize this change process. In managing the change process effectively and efficiently, it is essential that school administrators meet the

requirements such as allocating sufficient resources for technology, communicating with colleagues, and establishing the technological infrastructure needed at school (Leithwood and Riehl, 2003).

(Macaulay, 2009) school administrators; defined that those who control, use or support the use of technology in terms of ensuring the effective use of information technology in educational environments. In addition, they have determined that managers in the schools that are successful in their technology implementations are knowledgeable, relevant and supportive managers in their research. Bailey and Lumley (1997); They have developed a system for school administrators who want to play a more active role in the adaptation of information technologies to educational settings.

The parts of this system consist of technology leadership, technology planning and budget allocation, providing professional development opportunities, creating technology infrastructure, providing technical support, supporting technology and education and training practices, integrating technology into the curriculum and technology leadership.

The changes in education-training processes add to the role of technology leadership in addition to the existing roles of school managers (Anderson and Dexter, 2005). The technological progress as well as the possibility of technology leadership has a very important function because it will open a different window to the school administrators both in the management of the institution and in the professional development of the school staff (Akbaba Altun, 2000).

The main problem of the research is to determine the levels of school leaders' role in technology leadership so that technology can be utilized in a functional way during the education and training process. Education-teaching practice of technology is a specialty. This is called education technology (Doğan, 2000). In the research done by Şimşek (2001); Education technology is generally a global definition of the field of research and application in educational programs concerning the promotion and use of learning-teaching levels. Schools should make an effort to improve their institutional progress by using developments in technology. This is only possible with the technology leadership of school administrators. According to Benedetto (2006); School administrators, individuals who are able to use communication technologies for teachers in their own schools, develop effective learning models that lead and are examples in all these areas, and can use these processes in conjunction with effective methods of measurement and evaluation.

The prospect of technology is steadily increasing while reaching educational goals. Instructional technologies are a relatively recent area of discipline to enhance the quality of learning (Kaya, 2005). School managers have to keep up with rapidly changing technologies and have good technology accumulations. School administrators need to understand, apply, and accept technology. It is important that technological leadership will make a significant difference in educating school management and school personnel (AkbabaAltun,2002).

According to Yu and Durrington (2006); Today's technology innovations have provided qualified instructional materials in teaching. They are the basic figures that will decide the use of innovations in the institutions of the administrators. This is called Anderson and Dexter (2005); As technology leadership. Technology leadership in schools is a parameter that determines the pioneer.

In this recommended template, when we think of the whole school, some consequences arise. These, besides the use of pc by the students and teachers,

increase the teaching programs and activities by taking advantage of other school network usage, web sites, and contribute to the use of teachers and students in many areas. According to Weber (2006); The adaptation of technology to the school institution could be considered as a change or an innovation. The important thing is that the beneficiary will benefit from these technological developments and will not be able to make the teaching institution that he / she is managing at the maximum level effective. That is why school administrators must redefine their responsibilities as school stakeholders.

In this respect, this study aims to evaluate the technology leadership in the context of vocational school administrators. It is limited to the school principals who are the managers of 5 vocational schools from 13 vocational schools in the Turkish Republic of Northern Cyprus. As a problem sentence it is defined that What the School Administrators' Views Towards Technology Leadership and their applications for this technology in their organizations are. The sub problems identified in the framework of this problem sentences are as follows;

- a. What are your thoughts on initiating and implementing improvements and innovations in educational technology in your school at the level of technology leadership?
- b. In terms of technology leadership, how do you benefit from educational technologies when doing your managerial jobs? And what are your thoughts on building a technology board to cover all stakeholders in your school?
- c. As school manager, what are your thoughts to make educational technologies more effective for schools?

2 METHODOLOGY

This research was conducted using a qualitative method. Qualitative research is a method that adopts an interpretive approach to the problem of research based on a holistic view of disciplines. The facts and events that have been investigated are considered in their own context and interpreted in terms of what they mean to them (Altunışık vd., 2010).

2.1 Universe and Working Group

The universe of this work constitutes 13 vocational high schools in the Turkish Republic of Northern Cyprus. The study group is the school principals who are the administrators of 5 vocational schools selected randomly among these 13 vocational high schools. This study covers the spring semester of 2015-2016 education.

2.2 Data Collection Tool

Interview technique was used as data collection tool. Semi-structured questions were prepared and face-to-face interviews were held to increase the credibility of working with school heads during the interview. In a semi-structured interview, the researcher prepares interview questions that include questions that he plans to ask in advance. On the other hand, depending on the flow of the interviewer, the investigator may influence the flow of the interview with different questions or sub-questions, and may enable the person to open and elaborate his / her answers. The most important convenience of the semi-structured interview technique to the researcher is to provide more systematic and comparable information (Yildirim and Simsek, 1999). Interview questions were organized after consulting the literature with expert opinion. A total of seven questions in the interview form were downloaded as a result of expert remuneration so that the content validity was ensured. These interviews with school principals lasted about 25-30 minutes on average.

2.3 Data Analyses

Data were first written by the researchers in computer environment and then analyzed using qualitative research techniques using content analysis. The main purpose of content analysis is to help explain the collected data and associations. Data, summarized and interpreted by the descriptive analysis, processed with content analysis in-depth treatment and new concepts are discovered. The basic process doing in content analysis is to combine similar data in the framework of specific concepts and themes and organize them in the form of understanding for the reader. In order to interpret it. Before examining the stages of content analysis it is necessary to define the terms used (Neuman, 2012). The answers given by the school principals to each question were grouped in terms of similarities, and one or two answers given to each question were

presented in the same way. In order to increase the reliability of the work, a specialist's analyzes are taken into consideration and common points are determined.

3 FINDINGS AND DISCUSSION

The answer given by school administrators (Y1) to interview no. 1 is as follows;

I constantly advocate the need for reflection of technology and education in my school and I try to encourage our teachers. Because, according to the general principle accepted in the education systems in the world, the school principal is the education leader at the same time.. If education systems no longer follow or do not follow the developments in technology, there is no chance of success and sustainability.

The opinions of Y4 about the subject are as follows:

Scorecard, diploma etc. In the preparation of the documents, the 'Education Portal' is used in accordance with the student attendance-absenteeism. Our school continues to work to acquire the 'Smart School' program, which is a more comprehensive and useful program that we can use more efficiently in all our administrative processes.

When the answers of Y1 and Y4 to the first question are examined; Within the context of technology leadership, it has been determined that there is a common consensus on the use and dissemination of educational technologies.

The answers given by the school administrators interviewed by them to the interview No. 2;

Y1's views on the subject are as follows:

Technology leadership has become a must in school management. While doing lesson schedules, we have become a necessity when we use lesson modules in the course of student work.

The answer of Y2 to the same question is as follows:

We use computer presentations for school promotion. We actively use our Web site to inform the public and our people. Electronic mail (e-mail) is also used in correspondence with the Ministry and the sector.

Y4's answer to the same question is:

'Smart board', 'smart TV', projectors, reflection peripherals, laptop computers, wireless internet connection and two equipped computer laboratories are widely used in our school.

Y1, Y2 and Y4 are; In terms of technology leadership, it is assessed that when they do business

with management, when they use educational technologies and examine their opinions in terms of forming a technology board to cover all stakeholders in their schools, they are generally evaluated that they are trying to use technology in proportion to their opportunities and that this is a necessity in this age of technology.

Y2's answer to the last question is as follows:

In order to use education technologies more effectively, teachers are provided with in-service trainings to train themselves.

Y4's answer to the last question is as follows:

Establishing an infrastructure for educational technology in schools is not enough alone, as it is highly necessary. In this regard, school administrators and teachers should be trained, motivated and encouraged to use the facilities provided in this field. At the same time, students, parents, and even employers should feel more qualified and able to live by technology-supported education and training activities and be brought to a point where they demand it.

Y2 and Y4; It is clear from their answers that the widespread use of educational technologies is supported by intellectual support but it is not alone enough that educators should be given in-service courses.

4 CONCLUSION AND RECOMMENDATIONS

It is an undeniable fact that the use of technology in developed societies, especially in the use of formal education institutions, is an important milestone in the training of qualified individuals. In this research conducted to evaluate the technology leadership in the context of vocational school administrators, the widespread use of educational technologies has resulted in the finding that it is not enough alone, but that teachers should be given in-service courses.

It has come to the conclusion that vocational school administrators believe that it is necessary to act in the knowledge of the process leadership, the use of educational technologies, their own schools, the establishment of a technology committee to cover all stakeholders, the widespread use of technology in their capacity and the necessity of this technology.

Within the framework of the technology leadership, it was concluded that there is a common view on the school to start and implement the

developments and innovations in educational technologies.

The use of new educational technologies also requires training of trainers who will use these technologies.

For this purpose,

1. it is evaluated that it is appropriate to provide the conditions for planning and periodical arrangement of in-service courses for managers and teachers.
2. The Ministry of National Education may allocate budget to the schools for the technology project and may transfer the authority to the school administrators by encouraging their use.
3. For the purpose of widespread use of technology in schools, plans of cooperation with the existing universities can be made by authorizing the school administrators of the relevant ministries.

REFERENCES

- Akbaba Altun S. (2000). Okul Yöneticilerinin Bilgisayar Kullanma Düzeyleri.
- Akbaba Altun S. (2002). Okul yöneticilerinin teknolojiye karşı tutumlarının incelenmesi. *Çağdaş Eğitim*, 286, 8-14.
- Altunışık, R., Coşkun, R., Bayraktaroğlu, S., & Yıldırım, E. (2010). Sosyal Bilimlerde Araştırma Yöntemleri SPSS Uygulamalı (6. Baskı Sakarya: Sakarya Yayıncılık.
- Anderson R. E ve Dexter, S. (2005). School Technology Leadership: An Empirical Investigation of Prevalence and Effect. *Educational Administration Quarterly*, 41(1),49-82
- Bailey, G.D. & Lumley, D. (1997). Technology Planning: A toolkit for administrators and School board members.
- Benedetto, R. (2006). How Do Independent School Leaders Build the educational Technology Leadership Capacity of the School? Unpublished Doctoral Dissertation, Drexel University.
- Doğan, H. (2000). Bilgi Teknolojileri ve Eğitim. Adım. Bilimsel Düşüncenin Ürünü. Eğitim
- Kaya, Z. (2005). Öğretim Teknolojileri ve Materyal Geliştirme. Ankara: PEGEM A yayıncılık.
- Leithwood, K.A. & Riehl, C. (2003). What We Know about Successful School Leadership.
- Macaulay, L.S. (2009). Elementary Principals As Technology Instructional Leaders (Unpublished doctoral dissertation). University of Towson, the United States.
- Neuman, W. L. (2012). Toplumsal Araştırma Yöntemleri: Nicel ve Nitel Yaklaşımlar I-II. Cilt (5. Basım). İstanbul: Yayın Odası.

- Şimşek, N. (2001). Eğitim Teknolojisindeki Yönelimlerin Uluslararası Boyutları. Ankara
- Weber, M. J. (2006). A Study of Computer Technology Use and Technology Leadership of Texas Elementary Public School Principals. Unpublished Doctoral Dissertation University of North Texas
- Yıldırım, A. ve Şimşek, H. (1999). Sosyal Bilimlerde Nitel Araştırma Yöntemleri. Ankara: Seçkin Yayınevi.
- Yu, C. ve Durrington, V.A. (2006). Technology Standards for School Administrators: An Analysis of Practicing and Aspiring Administrators' Perceived Ability to Perform The Standards. NASSP Bulletin, 90 (4), 301–317.

Electronic references:

- <http://netc.org/cdrom/toolkit/html/toolkit.htm> (26 Nisan 2016)
- <http://cepm.uoregon.edu/pdf/whatweknow103.pdf> (25 Nisan 2016)

