



## SCHOOL ADMINISTRATORS TURNING DYSTOPIAS INTO UTOPIAS: TECHNOLOGY STORIES FROM LOW SOCIO-ECONOMIC SCHOOLS

### KARŞI-ÜTOPYALARI ÜTOPYALARA ÇEVİREN OKUL YÖNETİCİLERİ: ALT SOSYO-EKONOMİK OKULLARDAN TEKNOLOJİ HİKÂYELERİ

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**ABSTRACT:** The purpose of the study is to examine school administrators' accounts of barriers and constraints encountered during ICT integration. Although 12 narrative summaries were developed for this qualitative study, in this article, the researchers focused on the stories of three school administrators, who work at socio-economically low schools. Four themes emerged from these interviews; financing and establishing ICT infrastructure, maintenance of ICT, teachers' professional development and technology leadership. The results of this study are expected to provide ICT coordinators and school administrators with rich descriptions and experiences when dealing with the similar problems of ICT integration.

**Keywords:** ICT integration, success stories, qualitative research, school administrators

**ÖZET:** Bu çalışmanın amacı okul yöneticilerinin BİT entegrasyonu sürecinde karşılaştıkları engeller ve kısıtlamaları incelemektir. Araştırma 12 okul yönetici ile yürütülmüştür. Bu nitel çalışmada ise sosyo-ekonomik düzeyi düşük olan okullarda görev yapmakta olan üç yöneticinin deneyimleri yansıtılmıştır. Bu görüşmelerden dört tema belirlenmiştir; BİT altyapısının finanse edilmesi ve kurulması, BİT'in bakım-onarımı, öğretmenlerin profesyonel gelişimi ve teknoloji liderliği. Çalışma sonuçlarının, benzer BİT entegrasyonu problemleri ile uğraşan BİT koordinatörleri ve okul yöneticileri için zengin betimlemeler ve deneyimler sağlaması beklenmektedir.

**Anahtar sözcükler:** BİT entegrasyonu, başarı hikayeleri, nitel araştırma, okul yöneticileri.

### 1. INTRODUCTION

Information and communication technologies (ICT) entered into the lives of pupils and had an influence on the learning and teaching processes at schools. Technology has been perceived as a key that opens the gate of effective learning. Therefore, significant initiatives have been observed in Turkey in line with this notion in the last few years. Although there has been significant growth in the diffusion of ICT integration into education, teachers, school principals and ICT coordinators are still face with many barriers. This study focuses on accounts of school administrators who are trying to make significant changes at their schools. In other words, the study aims to collect technology stories of school administrators, who are struggling to turn their schools from dystopias into utopias.

“Utopia” comes from a Greek word “ou” and “topos”, meaning “no land”, in which people live in harmony and peace. It is a perfect political and social system that can not be practiced. “Dystopia” on the other hand is the opposite imaginary place, where people live unpleasant lives. Dystopia shows the hidden picture in utopia (Toran Hacifazlıoğlu, 1998). This study is designed based on the perspective that “hope” existing within the participants of the school (administrators, teachers, students and alike), may turn dystopian settings into utopias. It should also be noted that man can never reach the ideal place due to his or her human nature.

The study sought answers to investigate technology stories of school administrators working in disadvantaged areas- perceived as dystopias by some groups of people- with the assumption that there might be some signs of utopia beneath these stories. This article provides insightful stories of school administration struggling to realize their own utopias.

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School administrators are responsible for leading technology integration in their schools despite being unfamiliar with the pedagogical use of technology and not having enough training (Flanagan & Jacobsen 2003). Administrators need technology leadership competencies in order to maintain successful and meaningful technology integration. According to the ICT Impact Report by European Schoolnet, if technology isn't included in the overall school strategy, schools will face problems of unsuccessful organizational implementations (Balanskat, Blamire & Kefala 2006). Because ICT use is positively related to structural and cultural school characteristics, school administrators should develop a vision for technology planning and coordinate efforts (Akkoynlu, 2002; Aşkar & Usluel-Koçak, 2003; Tondeur et al, 2009; ISTE 2009; Hew & Brush 2007).

Efforts should not only be based on finding funds to purchase hardware and software. However, the absence or poor quality of ICT infrastructure, access to technology and lack of technical support were determined as main barriers (Balanskat et al 2006; Hew & Brush 2007). Donating schools with super computers does not guarantee that teachers will use that emerging technology in their courses. In fact, previous studies have shown that teachers' lack of knowledge and skills related to ICT and pedagogical use of ICT were also main barriers in ICT integration (Balanskat et al 2006; Hew & Brush 2007; Plante & Beattie 2004). Developing teachers' knowledge and skills on both technical and pedagogical aspects of ICT is important to make teachers more confident and motivated in using ICT in an innovative way in their classrooms (Balanskat et al 2006; Ertmer & Ottenbreit-Leftwich, 2010). For this, teachers will need in-service training on how to use technology in a pedagogically meaningful ways to facilitate learning (Somekh, 2008). However, isolated in-service training won't be effective for teachers because they could have problems in transferring their newly learned skills to the classroom. They will also need support in overcoming technical, infrastructural, managerial and pedagogical problems. So mentorship of school administrators and support of technicians or ICT coordinators are important for teachers to prevent them feeling isolated and left on their own. ICT coordinators (or formator/master teachers) are mentors who facilitate technology planning and guidance on the ways in which technology can be used effectively in schools. Technical personnel also have crucial importance when making decisions on technology and in the maintenance of the technology in schools. However, not all schools have the required staff, so school administrators often have to make difficult decisions on technology investment, mentor teachers' ICT use, and find ways of overcoming technical problems. They further have to develop a shared vision and integration plan for effective technology use, create a digital learning culture and provide opportunities for teachers' professional development (Flanagan & Jacobsen 2003; Lim, 2007; Bingimlas 2009; ISTE 2009; Ertmer & Ottenbreit-Leftwich, 2010). When administrators are unskilled or unprepared for managing these complex issues, they tend only to deal with financial or technical issues rather than pedagogical decisions (Flanagan & Jacobsen 2003). Moreover; school administrators' lack of technology leadership skills and negative attitudes towards ICT can hinder successful technology integration.

There are limited narrative studies on the roles of administrators in the process of ICT integration in schools. In this study, administrators who struggle to realize their utopias in successful technology integration were examined. Their stories show how they manage the ICT integration process and how they find solutions to overcome the barriers encountered.

## **2. METHOD**

The study design was based on qualitative method, with the focus on a narrative inquiry, with the aim of reflecting upon school administrators' experiences and thoughts. The study aims to reveal the "lived experiences" and successful strategies used by school administrators when coping with ICT integration barriers as well as socio-cultural factors. Narrative research provides opportunities to validate practitioners' (in this case administrators') voice to understand insights about challenging educational issues (Gay, Mills & Airasian 2009).

As the nature of the study is devised in the narrative model, semi-structured interviews were conducted to bring about deep insights into the experience and willingness of the participants to share their accounts. All semi-structured interviews were recorded and transcribed word by word. The

stories of school administrators have been analyzed using a content analysing technique. Themes were determined through the detailed analysis of the transcriptions.

## 2.1. Participants and Context

Within the purpose of the study, researchers collected technology stories of school administrators working in disadvantaged areas in order to reveal how utopias could be created in a dystopian context. Therefore, this study aimed to reveal the survival stories of schools administrators, who are trying to make a change in the lives of their students, teachers, parents and alike in search for a utopia. For this reason “extreme case sampling method” was used.

Although twelve narrative summaries were developed for this study, in this article, the researchers focused on the stories of three school administrators—one having ICT coordinator at his school and two having no ICT coordinators at their schools—because each demonstrated the technology integration process in their unique socio-cultural contexts. Pseudonyms were used to keep respondents’ identities confidential. All the participants were selected from socio-culturally disadvantaged regions of Istanbul city.

Three administrators, who work at socio-economically low schools in Istanbul were interviewed during a 5 month period from August to December 2010. The schools are located in Gaziosmanpaşa and Esenyurt, where the rural to urban migration rate is very high, many parents have low socio-economic status and there is a high fertility rate. Generally fathers work while mothers seldom have a job. According to the survey, carried out by one of the schools (School A) to determine the literacy rate of parents who live in the school enrolment area, 1151 (%14) adults were illiterate. Among the parents ( $n=16,000$ ) who have literacy skills, 10% had attended literacy programs. 85% had completed only a primary school education, 4% a high or vocational high school education, and 1% had an undergraduate degree.

2,648 students attend School A, 1,920 students attend School B and 1,300 students attend School C. There are approximately 60 students per class in School A, 45 students per class in School B and 40 students per class in School C. According to success ratings within the district according to the SBS (Centralized Placement Exam) exam, School A is ranked 31st and School B is ranked 30th rank among elementary schools in the Gaziosmanpaşa district. At School C, the ranking results are not significant. Though a few students appeared to achieve success in SBS exams in the Esenyurt district. The schools are both at the bottom of the list. One principal, 4 assistant administrators and 60 teachers work at School A. One principal, 4 assistant administrators and 50 teachers work at School B. One principal, 4 assistant administrators, 40 teachers and an ICT coordinator teacher work at School C. At all schools the teachers are young; most (approximately 90 per cent) are aged between 30-40 years. The reason for this young workforce is that teachers are placed according to their proficiency exam scores, which they take after graduation. These two locations serve as the first appointment place in Istanbul. However, teachers often request transfer to better schools so the teacher turnover rate is high at the schools involved in the study.

At school A, there are two computer laboratories (20 student pcs and 1 teacher pc) and 20 classrooms with one desktop computer and a projector in each. There is a conference room which has one desktop computer, a projector and a sound system. At school B, there is one computer laboratory (20 student pcs and one teacher pc), 24 classrooms with a projector and 5+1 sound system and smart boards at the classrooms. There is no ICT coordinator teacher at these schools. There are security cameras all over at schools A and B. At School C, all the classes have desktop pc, projectors, smart boards, audio visual sound systems. There is one computer lab at the school (35 student pcs and one teacher pc). Each teacher is also provided with personal laptops. There is an ICT coordinator teacher at this school. All schools have internet access which is provided by the government.

Kaan, who is the principal of School A, has 5 years teaching experience as a classroom teacher and he has 7 years of school administration experience. Mete, who is the principal of School B, has 7 years teaching experience and 6 years administration experience. Both of the participants declared that they have knowledge and skills, in using computers, internet and office programs and they further

stated that they are helping their personnel in solving computer related problems. Both of the participants hold an MA in educational administration.

School C is located at Esenyurt, a socio economically low area of Istanbul, where there are many immigrants like the schools in Gaziosmanpasa. However the profile of the parents are not socio-economically as low as the parents in School A and School B. Kemal, who is the principal of School C, has administrative experience both as a vice principal and the school principal for 10 years. He has also been to Germany as a teacher for five years.

## **2.2. Data Collection and Interview Procedure**

The researchers started the interview process by contacting school administrators via personal contact soliciting their voluntary participation, informing them of participation requirements and safeguards, and asking that they certify their informed consent. Interviews were conducted at researchers' faculty offices. All the interviews were recorded after getting each participants' permission. Only one of the principals (out of 12) did not allow his voice to be recorded.

During the interviews, reflective listening was used by the researchers in a way to listen and encourage the administrators to speak. The researchers tried to be very careful not to lead the participants in any sort of manner. After each interview, the contact summary form was used to highlight the main themes mentioned during the conversations.

## **2.3. Bias and Validity**

The researchers tried to be as much as objective as they could to prevent any sort of bias during the data collection and the analysis process. As scholars working in the field of educational technology and leadership, the researchers were aware of the fact that their background could be a potential source for bias. During the analysis, they also solicited input from their colleagues and invited them to contribute to their interpretation (Maxwell, 1996; Yıldırım & Şimşek, 2008). During the transcription the researchers were very careful to transcribe word-for-word, and paid close attention to the participants' unsolicited comments and observations. In addition the questions were open ended so that the participants could tell their stories better.

## **2.4. Data Analysis**

Analysis was divided into the five phases suggested by Marshall and Rossman (1999). These include: 1) organizing the data; 2) identifying themes, patterns and categories; 3) testing the emergent hypothesis against the data; 4) searching for alternative explanations of the data; and 5) writing the report. The researchers then selected excerpts from transcripts and placed them into broad categories in search of thematic connections within and across the transcripts (Seidman, 1998). Throughout the analytical process, school administrators' own voices and words were used to describe their experiences. "Cross case and cross over analysis" was used based on the responses from the interviews. Then the data was presented in a series of tables incorporating direct quotations from the participants. While reporting the results narrative summaries were developed mentioned as "thumbnail sketches" by Maxwell (1996; Miles & Huberman, 1994).

## **3. FINDINGS**

Interviews with the administrators revealed that managing and coordinating ICT integration is quite challenging. The themes derived from the analysis of the transcripts are as follows: Financing and establishing ICT infrastructure, Maintenance of ICT, Teachers' professional development and Technology leadership.

### **3.1. Financing and Establishing ICT Infrastructure**

Finding funds and then purchasing and installing required infrastructure was one of the most important themes that emerged during the conversations with the school administrators. All administrators emphasized financing as one of the main problems of ICT integration. They stated that although the Ministry of National Education (MoNE) has established computer laboratories and provided them with internet connection, no money has been allocated for the hardware to be used in the classrooms. All administrators have stated that they struggle to find funds. Kaan said that he and his assistant administrators had tried to find sponsors for smart classrooms with projector, computer and educational software. He said that they were able to finance 5 smart classes. He stated that a sponsor had promised 3 classes and the mayor has promised a further 6 classes. Kaan said he is planning to arrange a special ceremony and invite all the stakeholders who contributed to this effort. He said the best time would be to hold it on National Children's Day to show that this effort is a present both for the students and the parents. Thus he indicated that in their strategic plan, they are planning to establish 15 more smart classes. Kaan is aware of the fact that as a community leader he has a mission to discover the potential around the school and to find funds that could be used for the school. His words reflect how he transformed his school by dealing with the economic challenges:

“We were unable to allocate money for technology since we were dealing with the fundamental needs of the school such as security and cleaning. We in a way knocked on every door to get some support and were bought 15 projectors, a pc and software as a result of these attempts. Now our plan is to spread it to all.”

The same constraint was identified by Mete. Mete said they invited the parents to the school and explained the situation to them. They also demonstrated how they used projectors in classes to convince the parents. Parents were informed that their children would benefit from the integration of technology into teaching and learning process if their classrooms were equipped with the necessary equipment. Mete said that as a result of these meetings 70 percent of the parents gave support while 10 were convinced after having individual conversations. The rest said this is the responsibility of the government and they were reluctant to give any support. Mete said they were very sensitive about not disappointing the extremely poor parents.

As for the purchasing process, Mete stated that he searched for the best price and followed all the discounts and promotions in the media markets being aware that he needs to make the best use of the money. Mete further indicated that he was actively involved in installing the projector, configuring the network cables, setting up the electrical system and installing the sound system in the classrooms. He said they did not have the luxury of hiring a technician to set up the system. Therefore he served as teacher, as administrator and as technician during this process. His words reveal how technical skills can be crucial for establishing the infrastructure:

“We had an agreement with a company to set up the system. But it was a one time agreement then I had to fix it and make adjustments. Except for the wholesale items, I had to set up the projectors. Furthermore, I set up the network cables. I learnt how to deal with these issues when I was working at a small village school before coming to this school. Interestingly I learnt how to use a computer on my 3rd year as a teacher and I learnt it by myself.”

Kemal is the oldest of principals among the ones whom we interviewed. Though he seemed eager to serve as a technology leader, who could transform his school to an international arena. In this school Kemal and his colleagues asserted that the parent council served as a facilitator. They not only created opportunities for finance but also the culture to move into a transformation process. They tried to get the support of the stakeholders from factories and corporate firms located around the school area. Kemal reveals this process with the following words:

“... Our vision was to take place in the first rows in among the school rankings locally, nationally and internationally. This might sound impossible when it is first heard since we have to deal with many financial constraints at the public schools. We started this challenging process with our strong belief to success. Of course we lost some of our followers at the

beginning but they were the ones who never wanted to believe. Parents, Municipality, local education authorities, companies all believed in us and gave us support ...”

### **3.2. Maintenance of ICT**

All school administrators agreed that the cost of maintenance of ICT is a hindrance to effective ICT integration. The administrators indicated that they have problems when the guarantee period of the hardware elapses. The administrators overcome this barrier by fixing the problems by themselves or getting help from a teacher or an administrator who has technical skills. Mete described some innovative ways they had found to protect the hardware from the students. He said that they cover the network cables and set network jacks because students detach the cable's pins. He also stated that they have bought network devices and installed them in cupboards that the students can not reach, because devices had previously been destroyed or damaged by students. Further he stated the reasons for purchasing laptops instead of desktop pcs for classrooms as follows:

“The students broke desktop pcs so we choose to buy laptops. The laptops are stored in my office. The teachers use the laptops during their class hours. I keep track of the laptops on a spreadsheet”

Mete gives an example of the photocopy machine which was used by teachers. He said the machine was out of order most of the time due to misuse. He said they overcame this problem by assigning personnel to use the machine.

Mete and Kaan agreed that security cameras are very important for maintaining safety across the school. The schools are located at places of risk, where terrorist attacks and riots could take place. This is a special condition for the schools located around Gaziosmanpasa Region. That is why using technology to sustain security is one of the fundamental tools for these schools. Kaan said that he will use static IP to broadcast camera recording to parents. Mete related an experience of using a camera to keep the technology secure:

“We have 16 security cameras but we need 16 more as well. One of the students stole the speakers in the conference hall. I was informed about what happened and I listed the names of the students who used the hall by observing the camera recordings. The student denied stealing it at first but then when I showed him the recording he accepted that he did it. This meeting lasted approximately 2 hours. He went home with the security personnel and brought the speaker back to school.”

Mete's experience shows that security is a big issue in these schools. The problem is not only outside the school but it can come from the inside.

In School C the scenario seems better in terms of the maintenance of the technological infrastructure. Kemal asserts that family council helped them a lot to allocate support employees to the school. He stated that a couple of these employees also served as the technical support staff for the ICT coordinator. Therefore this is totally a different picture we see at Schools A and B, where administrative personnel served as the volunteered technical staff.

### **3.3. Professional Development of Teachers**

The administrators stated that teachers were motivated and confident about technology because they are mostly young. The teachers use Facebook to communicate with students, and teachers and administrators use msn for communication and file sharing outside of the school.

Mete's following observation testifies to the importance of teachers' technological knowledge and skills in the technology integration process:

“We had a smooth transition process since we had young teachers at the school. I know that we may have encountered resistance if we had a group who are reluctant to use it. Age serves as an important factor in technology acceptance and usage”.

Mete said older teachers were not totally resistant to technology but lack of knowledge and the skills prevented them from using it effectively. Mete pointed out that he served as a technology mentor for those teachers and he reveals his experience with the following words:

“... In the first few days they were able to turn the laptop on but unable to project it to the screen. At these times they would call me to their classes. Now they can do it on their own.”

This excerpt shows the importance of providing in-service training for teachers. The quality of in-service training will enable teachers to transfer their skills to the classroom teaching. Mete's thoughts about in-service training reflect the way he struggled to learn how to use technology by himself:

“I attended many in-service training courses arranged by the MoNE. I should confess that I learnt it all by myself through trial and error.”

However, he added that many teachers aren't motivated to learn the required ICT skills by themselves. He said that instead of working out how to do something on the computer they asked him first.

Kaan mentioned that in the first 3 months, teachers were motivated to spend time and develop materials. But then they became demoralized because of lack of time. Thus he decided to purchase educational software for smart classes because he realised that teachers were using ready-made educational software more easily. Mete agreed that teachers generally use video and educational software on cd or the internet. He also added that if a projector is broken, teachers want it repaired as soon as possible so they can use the educational resources.

In line with this idea, like the rest of the participants (10/12), Kemal indicated establishing the necessary culture for a technological serves as one of the main pillars of a successful technology integration process. Following words echo most of the administrators who were interviewed in this study:

“... We observed that some of our colleagues embraced technology whereas some felt reluctant to use it. In order to make this transition process smoother, ICT Coordinator arranged seminars and in-service training sessions to all the staff. As the administrative we also attended these seminars ... I benefited a lot ...”

### **3.4. Technology Leadership**

The administrators said that they use technology for managerial duties such as planning, reporting and tracking student enrolment. Both administrators stated that they plan to enrich technology integration and that they will continue to lead the process. Kaan stated that he is struggling to create a positive school culture and he has developed a technology plan with the teachers cooperatively. He stated that he believes he will transform the school through the help of technology. He also intends to add technology to the school's vision. He thinks that etiquette of leadership is so important in ICT integration. He declared that he believes in transparency policy especially for purchasing and financing issues. He stated that parents and teachers can ask any question about the technology integration process. The following excerpt attests to his leadership role for different stakeholders;

“I want to sustain the communication with the parents via technology. I hope we can inform parents via sms and/or email about meeting dates, student attendance and such. Hiring a formator teacher will also enable us to open courses for the parents most of whom are computer illiterate. Another possibility is to create an online platform where teachers are involved in a learning community setting. This summer we will use our computer labs as internet cafes for the children in our neighbourhood. It will be free of charge and we are planning to protect and train our children as well. In this way we will prevent parents sending their children to internet cafes, which are full of risk for the students. We heard that terrorist groups also use internet cafes to brainwash our children”.

Mete also declared his plans to enrich the technology resources at the school.

"For the future we are planning to install cupboards in the classrooms. Right now we are establishing a library. We have put in 5 pc tables but we do not have pcs. I have been in contact with Nongovernmental organizations and we are trying to find alternative ways to support my school."

Principal Kemal also used leadership terminology a lot during his conversation. He mostly mentioned the importance of having a "vision" as a school principal. Although Kemal appeared to accomplish most of his goals, he still has dreams to be realized. He indicated that they started to have parents who want to move their kids from private schools to their school. They believe this is a very significant indicator of their success, especially at a country setting where centralized exam ratings play a major role in parents' preference in school choice. It appears that School C was able to take place in this competitive arena through the hard work of their administrative team, teachers, parents and the outside stakeholders.

The administrators stated that, above all, they have a dream for their schools. They hope they can realise this dream with their colleagues.

#### **4. DISCUSSION and CONCLUSION**

This study revealed that schools administrators could turn their schools from dystopias into utopias. However, it showed that beauty and idealism is "in the eye of the beholder". Kaan, Mete and Kemal all have struggled to create a better school setting for their students. However, these could be seen as meagre attempts for administrators working at socio-economically high schools, where there are limitless opportunities both for the students and the teachers. As it was asserted by the participants, this is the reality of Turkey. In a city like Istanbul, it is possible to observe schools on a wide spectrum, ranging from extremely poor to extremely wealthy. "Financing and establishing ICT infrastructure, maintenance of ICT, professional development of teachers and technology leadership" were the four main themes determined in the voices of the school administrators.

Infrastructure and financial constraints were mentioned as one of the barriers to ICT integration. It seems that the administrators created opportunities to overcome these constraints through their own means. They appear to be quite successful in maintaining the various stakeholders. In this sense, they can be seen as role models for community leaders as well as technology leaders trying to transform their schools. It appeared in their stories that they found alternative ways to establish a school setting enriched with technology. The other theme that emerged in the conversations was the "maintenance of the ICT" at schools. School administrators' experiences showed that creating a culture within the school is a crucial factor that protects the safety of the equipment. Although maintenance and finance are two technical dimensions, they also serve as tools to create a culture of collaboration and awareness in the school. School administrators connected these two themes with the ideas of "professional development of teachers" with the belief that integration of ICT is a collaborative move to create a learning atmosphere that spurs active learning. Participants also noted that teachers should not move in extremes when using technology. In line with this argument, Bakioğlu & Hacifazlıoğlu (2008) found in their study that technology as "resistance" or "addiction" is two dangerous extremes. The results of the mentioned study indicated that most lecturers fail in the mistake of feeling a sense of commitment to technology. In some cases this commitment appeared to be result in tragic cases, where students felt themselves alienated in the classes. Therefore, the way how technology is practized as a tool for learning and reflection should carefully be planned at schools. Schools administrators in this context has an important role as technology leaders in ways of creating platforms for teachers' professional development. Further studies could be designed on a longitudinal stance. Exploring the stories on a long term period might give insights to the schools administrators working in these disadvantaged neighborhoods. Stories could also be collected from the other stakeholders, such as students, teachers and parents. This could provide rich descriptions of the schools from different lenses.

Professional development of teachers was found to be the third theme that was emphasized in the study. Participants' words echoed each other by saying that the way how teachers should use

technology “without being the slave of it” needs to be understood. In the selected narrative Mete, Kaan and Kemal all indicated that the teachers were actively involved in the integration process. The administrators argued that the reason for this is that most of the teachers are young, motivated to use ICT in their classrooms and have the required technological skills. However teachers don’t want to work in those schools for many years. They often request transfer to better schools in higher socio-economic districts whenever they get a chance. This circumstance might also be a barrier to sustaining the ICT integration process in the schools. It was meaningful to hear that young teachers were eager to help the older ones as technology mentors. Although teachers in those schools were not familiar with the concepts of “reflective practice” and “mentoring” (Bakioglu, Hacifazlioglu & Ozcan, 2010), they were actively involved in the collaborative learning process. When the rest of the interviews were analyzed, it was apparent that school principals based their development and integration plans on “team leadership”, where they received huge support from their vice-principals and coordinators (9/12). These stories could be seen as signs of hope and utopia in a challenging context. Professional development of the teachers in this study appeared to be one of the main pillars of a learning environment at a school. School administrators could work collaboratively with the faculties of education and the experts of the field to provide opportunities for their teachers’ professional development in order to practice technology skillfully.

“Technology Leadership” was determined as the fourth themes that encompass all the above mentioned three themes in the study. Although the administrators perceived difficult barriers such as financing, establishing and maintaining ICT, they also stated their initiatives on pedagogical aspects of ICT. Their efforts to purchase educational software show that they observe and track difficulties encountered by teachers when using ICT. They also served as technology mentors for the teachers. At School C, the administrator got support from ICT coordinator in maintaining ICT and arranging in-service trainings. As well, the administrators declared that they have plans to transform the school into their dream school by using and spreading technology to the community. Therefore we can say that the administrators act as technology leaders of the community and they are attempting to create and disseminate the digital age learning culture within and outside the school area. While serving as technology leaders it appeared that school administrators also play the role of community leaders not only in their schools but also in their neighbourhoods. In parallel with this finding, a significant effort regarding their community related tasks was found in relation to the parents. Kaan indicated that he tries to involve the parents by opening computer classes for them. He is aware of the fact that they need to train the parents if they want to train their students, especially when working in an area where the citizens are at risk. In Mete’s case, it was seen that students could also be a risk factor for both the school and other students. Mete said that he tries to train the students in order not to harm school property. Mete believes that as educators they need to integrate these students into social life. Both Mete and Kaan also described the reading and writing classes they opened for illiterate parents. They also arranged seminars for parents to increase their awareness about child development. Here, teachers and administrators have an additional burden on their shoulders if they are to give the necessary education and training both to the students and the parents in order to teach them to become a member of a community. We can say, therefore, that the administrators and the teachers in these schools look forward to creating a safe and homely atmosphere and this is a kind of utopia in their eyes. At School C, it is evident that parents could make significant contributions on the schools improvement. Although School C is located at a socio-economically disadvantaged neighbourhood, the school achieved national and international recognition through the hard work of all the stakeholders. In this case, utopia is perceived not only at a national level but at an international level. This attitude echoes many scholars’ thoughts about school culture. Somekh (2008) and Ertmer & Ottenbreit-Leftwich (2010) content that creating a shared vision and building a supportive culture to encourage innovation, schools must also provide adequate resources to support successful technology use. In most of the cases, lack of resources was mentioned as a barrier to successful technology integration (Hew & Brush, 2007). However, when building a supportive infrastructure, it is important that schools be well equipped, not only with ICT resources, but with the pedagogical expertise needed to facilitate meaningful uses. Celep (2004) also asserts that school principal should serve as a facilitator, who establishes the necessary ground for professional development. Creating a culture will allow the

school a space to manoeuvre in the transformation process. Additionally, in order to realize the excellence in professional practice performance indicators, opportunities for the “communities of practices” should be created. In this way, administrators, teachers and supervisors could have a setting, which would enable them to share their practices and experiences (Hacifazlıoğlu, Karadeniz & Dalgıç, 2010). Findings of this study appeared to be in line with the idea of community leadership. School administrators serve as community while realizing their utopias. It appeared in this study that technology could be an instrument in revealing the potentials of school administrators as community leaders. Further studies could investigate the relations between various leadership roles in accordance with the notion of technology. Experiences of the local ministries of education could also be investigated to provide alternative solutions to the schools in terms of the four themes determined in this study: “finance, establishing and maintenance of ICT, teacher professional development and technology leadership”.

In all the interviews (12/12), it was observed that school administrators perceive their settings as dystopia and try to reach their ideals. Actually, this could be explained with the notion of “hope” and “human nature”. As it was asserted by Aydin (2006) that “hope for the better world” is the existing power in the self. The seeds of “love” could blossom if we continue to “believe and hope”. Teachers working in disadvantaged schools could be provided with the opportunities to share and reflect their experiences. In this way they could feel more comfortable and confident to deal with the challenges they encounter in their classrooms. This study focused specifically on schools located in disadvantaged neighborhoods. Comparative studies could be conducted to analyze the context of schools in low and high socio-economic neighborhoods. Utopian and dystopian perspectives could be channeled by looking deeply at schools located in advantaged neighborhoods.

The study revealed that there is no explicit prescription for successful ICT integration. Whilst there is an ideal utopian ICT integration at a school, it could be seen as a dystopia by another group of teachers, students and administrators alike. Therefore the degree at which the administrator serves as a transformative technology leader could depend on “the eye of the beholder”, depending on the specifics of their context.

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## Genişletilmiş Özeti

Bu çalışmanın amacı, okullarında anlamlı değişiklikler yapmaya çalışan okul yöneticilerinin BİT entegrasyonu sürecinde karşılaşıkları engeller ve kısıtlamaları belirleyerek bunları nasıl aşıklarını incelemektir. Okul yöneticileri, okullarında teknoloji entegrasyon sürecine liderlik ederken birçok engel ile karşılaşmaktadır. Bunlardan bazıları şu şekilde sıralanabilir; okul yöneticilerinin teknoloji liderliği, teknolojinin pedagoji ile kullanımına ilişkin bilgi ve beceri eksiklikleri (Flanagan & Jacobsen 2003); okul stratejik planına teknolojinin dahil edilmemesi (Balanskat, Blamire & Kefala 2006); okul yöneticilerinin teknolojinin entegrasyonu için paydaşlar tarafından da paylaşılan bir vizyon geliştirememesi, okul içerisinde dijital bir öğrenme kültürü oluşturmaması ve öğretmenlerin profesyonel gelişimlerini sağlamaması (Flanagan & Jacobsen 2003; Hew & Brush 2007; Lim, 2007; Bingimlas 2009; ISTE 2009; Ertmer & Ottenbreit-Leftwich, 2010). Bu nitel çalışmada, başarılı bir BİT entegrasyon sürecini gerçekleştirmek için okullarında ütopyalarını hayatı geçirmeye çalışan okul yöneticilerinin hangi engeller ile karşılaşıkları ve bu engelleri nasıl aşıklarına ilişkin hikayeleri incelenmektedir.

Çalışma, hikaye etme (narrative) araştırması temel alınarak gerçekleştirılmıştır. Hikaye etme çalışmaları, eğitimdeki zorlayıcı konularda, uygulamacıları daha iyi anlayabilmekte onların seslerinin duyulması için fırsatlar sunmaktadır (Gay, Mills & Airasian 2009). Çalışmada 12 okul yönetici ile yarı-yapılardırılmış görüşmeler 5 ay boyunca (Ağustos-Aralık 2010) gerçekleştirılmıştır. Görüşmeler bir katılımcı dışında izin alınarak kayıt edilmiştir. Tüm görüşmeler yazılı hale getirildikten sonra, veriler analiz edilmiştir. Çalışmaya katılan okul yöneticilerinin isimleri araştırma raporunda değiştirilmiştir.

Bu makalede, kendi bulundukları bağlamda özgün hikayeler sunan 3 okul yöneticisinin hikayeleri üzerinde durulmuştur. Yöneticiler sosyo-ekonomik olarak düşük okullarda görev yapmaktadır. Gaziosmanpaşa'daki 2 okul (Okul A ve B), SBS sınavında ilçede son sıralarda bulunmakta iken Okul C ise SBS sınavında nispeten daha başarılıdır. Okullarda görev yapan öğretmenlerin çoğunluğu gençtir ve öğretmenlik mesleğine bu okullarda başlamışlardır. Bütün okullarda şu anda BİT laboratuvarı bulunmakta ve sınıflarda bilgisayar ve projeksiyon kullanılmaktadır.

Verilerin analizi beş aşamada gerçekleştirılmıştır (Marshall & Rossman, 1999): 1) verilerin organize edilmesi; 2) tema, örüntü ve kategorilerin tanımlanması; 3) ön hipotezlerin test edilmesi; 4) verilerin açıklanmasından alternatiflerin araştırılması ve 5) raporun yazılması. Ardından görüşme metnindeki ilgili

aktarmalar seçilip kategorilere yerleştirilerek metin içindeki tematik bağlantılar bulunmuştur (Seidman, 1998). Veriler daha önceden hazırlanmış olan tablolara aktarılmış, her bir katılımcının karşısına ilgili tema ve deneyimi yansıtılmıştır. Araştırma bulgularının yazımında, okul yöneticilerinin deneyimleri kendi sözleri ile de sunulmuştur.

Verilerin analizi sonucu dört tema belirlenmiştir; BİT altyapısının finanse edilmesi ve kurulması, BİT'in bakım-onarımı, öğretmenlerin profesyonel gelişimi ve teknoloji liderliği. Okul yöneticileri için en önemli engelin BİT altyapısının kurulması için gerekli finansman desteğinin sağlanması olduğu belirlenmiştir. BİT laboratuarları MEB tarafından kurulmuş olsa da sınıfların bilgisayar ve projeksiyon veya ses sistemi ile donatılmasında okul yöneticileri sponsor bulmuşlar, belediyeden destek sağlamışlar veya velilerden destek istemişlerdir. Okul yöneticilerinden biri ise projeksiyonun sınıfa kurulmasında ve ağ altyapının kurulmasında bizzat kendisinin çalıştığını belirtmektedir. İkinci önemli tema ise kurulan bu altyapının bakım ve onarımının sağlanmasıdır. Okul yöneticileri, donanımların garanti süreleri bittiğinde sıkıntılardan yaşadıklarını belirtmişlerdir. Bunun üstesinden gelmek için ise oluşan donanım problemlerini, teknoloji becerileri olan bir öğretmen veya yöneticiye danışarak veya okulda formatör öğretmen varsa ona danışarak kendileri çözümlemeye çalışmaktadır. Ayrıca okul yöneticileri donanımların öğrenciler tarafından kırılması ihtimaline karşılık da bu donanımların güvenliğini sağlamak amacıyla çeşitli önlemler almışlardır. Okul yöneticileri için üçüncü önemli tema ise öğretmenlerin profesyonel gelişimidir. Yöneticiler, okullarındaki öğretmenlerin çögünün genç olması nedeniyle teknoloji becerilerinin iyi düzeyde olduğu için ve teknoloji kullanımında istekli oldukları için BİT entegrasyonu sürecinde zorlanmadıklarını belirtmişlerdir. Meslekte deneyimli olan öğretmenler için ise kendileri teknoloji ile ilgili problemlerde onlara yardımcı olmuşlardır. Bir okul yöneticisi de okulda gerekli kültürün sağlanmasıının önemini belirterek tüm öğretmenleri için formatör öğretmen tarafından sunulan hizmetçi eğitim seminerleri düzenlediklerini ve bunlara kendisinin de katıldığını belirtmiştir. Bir okul yöneticisi ise öğretmenlerin zaman sıkıntısı nedeniyle materyal hazırlamada problem yaşadıklarını gözlemleyerek okula eğitimsel yazılımlar almıştır. Çalışmaya katılan okul yöneticilerinin, öğretmenlerin teknoloji kullanımını takip ettileri, onları bu süreçte destekledikleri söylenebilir. Çalışmada son tema ise teknoloji liderliği olarak belirlenmiştir. Okul yöneticileri, olumlu bir okul kültürü oluşturmaya çalışıklarını ve öğretmenler ile birlikte bir teknoloji planı geliştirdiklerini belirtmişlerdir. Okullarındaki BİT entegrasyon sürecinin başarılı olmasında liderlik ve vizyonunun önemine de dikkat çekmişlerdir.

Araştırmaya katılan okul yöneticilerinin, BİT entegrasyonu açısından okullarındaki karşı ütopyaları ütopyalara dönüştürebildikleri görülmektedir. Ancak bu çalışma bulguları da göstermektedir ki idealizm ve güzellik "seyircinin gözüne" göre değişmektektir. Okul yöneticileri, daha iyi bir okul ortamı yaratmak için çabalamışlardır. Bu çaba sürecinde ise karşılaşlıklar engelleri genelde kendi okul ve çevrelerindeki imkanları seferber ederek aşmaya çalışmışlardır. BİT altyapısı için gerekli finansal desteği bulmuşlar, donanımların tamir ve bakımını kendi okullarında gerçekleştirmiştir, öğretmenlerin teknik sorunlarında yardımcı olmuşlardır, eğitimler düzenlemişler ve okullarındaki bu süreçlere liderlik yapmışlardır. Okul yöneticileri bu süreçte öğretmenlerin etkin olarak katılmalarını sağlamışlardır. Bu nitel çalışmada okul yöneticileri hem bir rol model, hem bir takım lideri hem de bir teknoloji lideri olarak çaba sarf etmişlerdir.

Sonuç olarak, her farklı ortamda okulda başarılı bir BİT entegrasyonu için hazır tek bir reçete bulunmadığı söylenebilinir. Ayrıca bir okul yönetici tarafından ütopya olarak görülen bir durum, başka bir yönetici tarafından ise bir karşı ütopya olarak da görülebilinir. Bu nedenle, okul yöneticisinin BİT entegrasyon sürecindeki liderlik davranış özellikleri, okul yöneticilerinin bulunduğu bağlamın özellikleri ve farklı bakış açılarına göre değişim能力和 gözden kaçırılmamalıdır.

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