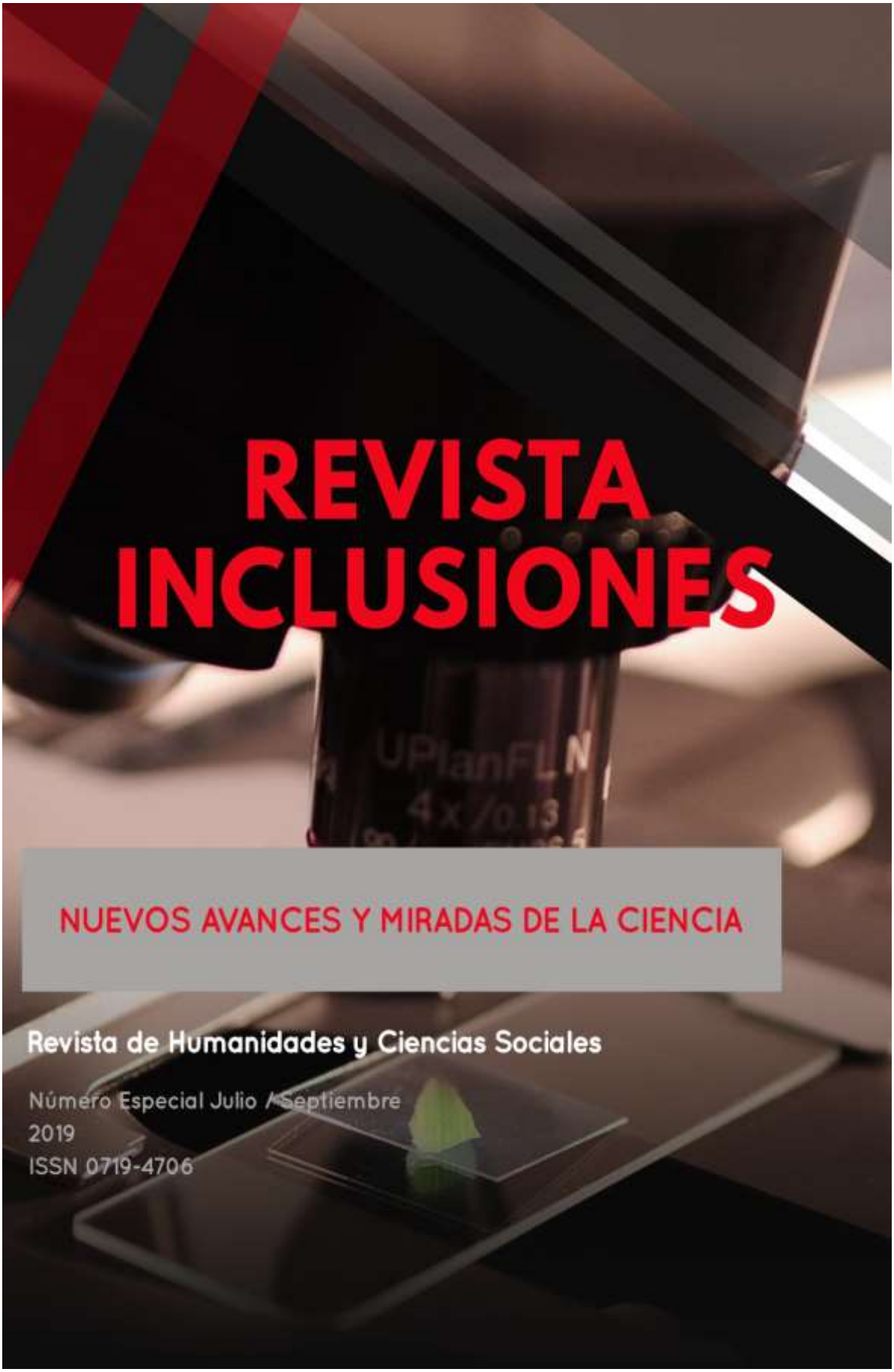

REVISTA INCLUSIONES

NUEVOS AVANCES Y MIRADAS DE LA CIENCIA

Revista de Humanidades y Ciencias Sociales

Número Especial Julio / Septiembre
2019
ISSN 0719-4706

REVISTA INCLUSIONES
REVISTA DE HUMANIDADES Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA EDITORIAL

REVISTA INCLUSIONES
REVISTA DE HUMANIDADES Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA EDITORIAL

REVISTA INCLUSIONES
REVISTA DE HUMANIDADES Y CIENCIAS SOCIALES

Dra. Yolando Ricardo
Universidad de La Habana, Cuba

Dr. Manuel Alves da Rocha
Universidade Católica de Angola Angola

Mg. Arnaldo Rodríguez Espinoza
Universidad Estatal a Distancia, Costa Rica

Dr. Miguel Rojas Mix
Coordinador la Cumbre de Rectores Universidades Estatales América Latina y el Caribe

Dr. Luis Alberto Romero
CONICET / Universidad de Buenos Aires, Argentina

Dra. Maura de la Caridad Salabarría Roig
Dilemas Contemporáneos, México

Dr. Adalberto Santana Hernández
Universidad Nacional Autónoma de México, México

Dr. Juan Antonio Seda
Universidad de Buenos Aires, Argentina

Dr. Saulo Cesar Paulino e Silva
Universidad de Sao Paulo, Brasil

Dr. Miguel Ángel Verdugo Alonso
Universidad de Salamanca, España

Dr. Josep Vives Rego
Universidad de Barcelona, España

Dr. Eugenio Raúl Zaffaroni
Universidad de Buenos Aires, Argentina

Dra. Blanca Estela Zardel Jacobo
Universidad Nacional Autónoma de México, México

Comité Científico Internacional

Mg. Paola Aceituno
Universidad Tecnológica Metropolitana, Chile

Ph. D. María José Aguilar Idañez
Universidad Castilla-La Mancha, España

Dra. Elian Araujo
Universidad de Mackenzie, Brasil

Mg. Rumyana Atanasova Popova
Universidad Suroeste Neofit Rilski, Bulgaria

CUADERNOS DE SOFÍA EDITORIAL

Dra. Ana Bénard da Costa
Instituto Universitario de Lisboa, Portugal
Centro de Estudios Africanos, Portugal

Dra. Alina Bestard Revilla
Universidad de Ciencias de la Cultura Física y el Deporte, Cuba

Dra. Noemí Brenta
Universidad de Buenos Aires, Argentina

Dra. Rosario Castro López
Universidad de Córdoba, España

Ph. D. Juan R. Coca
Universidad de Valladolid, España

Dr. Antonio Colomer Vialdel
Universidad Politécnica de Valencia, España

Dr. Christian Daniel Cwik
Universidad de Colonia, Alemania

Dr. Eric de Léséulec
INS HEA, Francia

Dr. Andrés Di Masso Tarditti
Universidad de Barcelona, España

Ph. D. Mauricio Dimant
Universidad Hebrea de Jerusalén, Israel

Dr. Jorge Enrique Elías Caro
Universidad de Magdalena, Colombia

Dra. Claudia Lorena Fonseca
Universidad Federal de Pelotas, Brasil

Dra. Ada Gallegos Ruiz Conejo
Universidad Nacional Mayor de San Marcos, Perú

Dra. Carmen González y González de Mesa
Universidad de Oviedo, España

Ph. D. Valentin Kitanov
Universidad Suroeste Neofit Rilski, Bulgaria

Mg. Luis Oporto Ordóñez
Universidad Mayor San Andrés, Bolivia

Dr. Patricio Quiroga
Universidad de Valparaíso, Chile

REVISTA
INCLUSIONES
REVISTA DE HUMANIDADES
Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA
EDITORIAL

Editorial Cuadernos de Sofía
Santiago – Chile
Representante Legal
Juan Guillermo Estay Sepúlveda Editorial

Indización, Repositorios y Bases de Datos Académicas

Revista Inclusiones, se encuentra indizada en:

CATÁLOGO

BIBLIOTECA UNIVERSIDAD DE CONCEPCIÓN

REVISTA INCLUSIONES
REVISTA DE HUMANIDADES Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA EDITORIAL

ISSN 0719-4706 - Volumen 6 / Número Especial / Julio – Septiembre 2019 pp. 100-115

THE ROLE OF TECHNOLOGY FOR SCHOOL MANAGEMENT AND DEVELOPMENT

Betül Yıkıcı
University of Kyrenia, Northern Cyprus
Meryem Bastas
University of Kyrenia, Northern Cyprus
Fahriye Altınay
Near East University Nicosia, Northern Cyprus
Gokmen Dagli
University of Kyrenia, Northern Cyprus
Zehra Altınay
Near East University Nicosia, Northern Cyprus

Fecha de Recepción: 21 de marzo de 2019 – **Fecha Revisión**: 16 de abril de 2019

Fecha de Aceptación: 28 de junio de 2019 – **Fecha de Publicación**: 01 de julio de 2019

Abstract

The purpose of this research is to examine stakeholders on school principals' readiness for the role of technology in school management and development. In this study, the case study method was used within the merits of the qualitative research approach.The data was collected by interview technique and document analysis (research diary). The results of the research indicate that there are effect on the reflection of socio-economic, cultural and technological changes in the society to school management, school manager has a great role to the technology use and compliance and teachers are facilitators to diffuse technology for the school management and development.

Keywords

School administrator – School development – Technology – Teachers

Para Citar este Artículo:

Yikici, Betül; Bastas, Meryem; Altinay, Fahriye; Dagli, Gokmen y Altinay, Zehra. The role of technology for school management and development. Revista Inclusiones Vol: 6 num Esp Jul-Sep (2019): 100-115.

Introduction

Changes in schools are observed as reform and school development in education[1]. Organizational change is the reconstruction of the missions, objectives and organizational structure in the organization. Such deviations cause changes in the organization of the organization which includes the relations in organization, the rules, and roles besides the change of beliefs, values and acceptances[2]. As an open system, change in schools is also inevitable. Schools are expected to continuously update themselves and improve themselves by using changing technology. Regarding school effectiveness and efficiency, school administrators have a critical role. Çalık and Kılınç[3] emphasizes that the task of the education system is to educate individuals who are learning to learn, and that the main aim of education administrators is to bring the school to the learning school profile.

The school is a concrete organization of the education system for the purpose of production, where a program is developed by applying a program to students in a certain age group[4]. The school is the most functional part[5], a strategic and indispensable element of the education system[6]. The particular feature that distinguishes the school from other educational institutions is that it works on human and differentiates it[7]. It is claimed that schools have a regular, disciplined and expert organization that keeps the individuals on-site from their childhood. The aim of the school is to prepare children for life. Nowadays, the importance and the purpose of education, and expectations from school have been changed[8]. The process of technological and social change pushes the education and training process of schools to be reorganized by re-establishing the relationship between organizational management and school environment. Also, sudden changes affect the structure of school and learning environment. Being a learner in the 21st century envisions our aim to raise individuals who are more inquisitive, problem-solving and eligible to implement the principle of proximity to life. Thus, schools are a social system institution that enables us to build the infrastructure of skills for social needs. Schools are instrumental in meeting the needs of information, the use of accurate information in information production and in emphasizing the integration of this information into society. The importance of school development is revealed during the process of in the development of creative thinking skills[9].

One of the main aims of education is to educate students as individuals who are equipped with to prepare them for the business world by facilitating the daily life of the students. One of the main aims of education is to train the students as equipped individuals who are ready for the business world by facilitating their daily lives. It is

[1] Í. Şahin, İlköğretim OkulMüdürlerinin Okul Geliştirme Stratejilerive UygulamalarınaİlişkinGörüşleri. 2013.
[2] Y. Özden, Eğitimde Yeni Değerler Eğitimde Dönüşüm 7 (Baskı: Pagem Akademi, 2008).
[3] T. Çalık & A. Kılınç, "Öğretim Lideri Olmanın AnlamınaİlişkinFenomenolojik Bir Araştırma", Eğitim Kuramve Uygulama Araştırmalarıdergisi, Vol: 4 num 1 (2018): 1-13.
[4] A. Açıkalın, Toplumsal Kurumsalve Teknik Yönleriyle Okul Yöneticiliği. Pagem. 1998.
[5] A. Açıkalın, Toplumsal Kurumsalve Teknik Yönleriyle…
[6] T. Aytaç, Eğitim Yönetiminde Yeni Paradigmalar Okul Merkezli Yönetim (Ankara: Nobel Yayın Dağıtım, 2000)
[7] A. Açıkalın, Toplumsal Kurumsalve Teknik Yönleriyle…
[8] N. Yıldırım and S. Okul Gelişimi, Editör Özdemiriçinde, Eğitim Yönetiminde Kuramve Uygulama (s. 355-380) (Ankara: Pagem Akademi, 2013).
[9] R. Balay, "Küreselleşme, Bilgi Toplumuve Eğitim", Ankara Üniversitesi Eğitim Bilimleri Fakültesi, Vol: 37 num 2 (2004): 61-82.

emphasized that students should develop cognitive skills (language, math, etc.) as well as non-cognitive skills (which will facilitate their implementation). In order to be successful in the information age, learners should adopt 21st century skills which are problem solving, communication, cooperation, creative and critical thinking[10]. Besides, learners are expected to have life and career skills with media and technology skills[11]. Education also changes depending on social, economic and political changes. Since the beginning of public education, a strong emphasis is placed on teaching basic skills including reading, writing and mathematics. Besides preserving the importance of these skills, recently,it has been observed that more emphasis is placed on teaching 21th century skills. Cognitive skills that are called 21st century skills (critical thinking, problem solving, etc.) are referred as interpersonal relationships, social skills; learning and innovation skills Information, Media and technology skills life and career skills. Agut, Grav, Peiro[12] emphasizes that the management of schools can be achieved with managerial understanding, knowledge skills and behaviours in accordance with changing socio-economic and technological changes. School administrators and their competences play an important role in creating the educational and instructional environment and in increasing student learning.

In this context, it is important for school administrators to adapt and use technology integration in the changing system that may enable them to lead organizational development and strategic planning studies. The use of technology and its compliance play a major role in supporting the learning of the next generation.

Research questions;

1.- What are the views on the reflection of socio-economic, cultural and technological changes in the society to school management?
2.- What are school managers ' views on technology use and compliance?
3.- What are teachers ' views on technology use and compliance?
4.- What are the perceptions of teachers' union representatives on the use and compliance of technology?

Methodology

In this study, case study method was used within the framework of qualitative research approach. In the research, interview technique and document analysis (researcher diary) were used as data collection tools. In the study, a total of 70 participants were interviewed who work under the Ministry of National Education and Culture; 18 school principals, 17 administrative assistants, 18 teachers, 12 teachers union representatives, and 5 Ministry senior managers. The data were collected in a semi-structured interview form based on the literature review and the claims of the field experts. The results were finalized with document analysis and evaluated with content analysis. In some research texts in the related literature, data analysis is presented as a starting phase after data collection is completed and a clear distinction has been made between data

[10] G. Ekici; Ö. Abide; Y. Canbolat & A. Öztürk, "Yüzyılbecerlerine Ait verikaynaklarının Analizi", Eğitimve Öğretim Araştırmaları Dergisi, Vol: 6 num 12 (2016): 124-134.
[11] S. Yalçın, "Yüzyıl Becerilerive Bu Becerilerin Ölçülmesinde Kullanılan Araçlarve Yaklaşımlar", Ankara Üniversitesi Eğitim Bilimleri FakültesiDergisi, Vol: 51 num 1 (2018): 183-201.
[12] S. Agut; R. Grau & J. Peiro, "Individual And Contextual İnfluences On Managerial Competency Needs", Journal of Management Development, Vol: 22 num 10 (2003): 906-918 https://doi.org/10.1108/02621710310505494.

collection and analysis procedures[13]. During the research period, the researcher struggled with this distinction and before completing the field study, as Patton[14] stated, she aimed tocomprehend recorded data without focusing too much on the analysis at the early stage and avoided official coding. This approach has been used to enrich the data collection methods by adding new queries for the participants on the basis of recently emerging concepts. For example, in the first interviews, the concept of 'training needed by the training managers' was determined that the following participants were interviewedbased on this concept. Along with the data collection process, data analysis was also conducted simultaneously to determine the focus of the research.

Data analysis is to encode data, combine codes under categories or themes to compare and present with graphs, tables and charts. Data collected from the study group were analysed in depth using the data analysis (based on coding) method. Thus, it was enabled to reveal the themes and dimensions that haven't been clarified. In content analysis, it is aimed to find out the concepts that can interpret the collected data. In content analysis, the data that have commonalities are arranged and interpreted together within the framework of certain concepts and themes[15].

Research findings were carried out in three stages with content analysis;

1.- At the end of the first stage of the interview, the voice recordings were transcribed and kept in a written form to be analysed in the following stages.
2.- In the second Stage, the researcher and supervisor read the data thoroughly in order to determine the dimensions that are relevant to the purpose of the research. The data obtained from the participants were examined, coded and categorized accordingly. Based on the data, detailed codes have been established[16]. The code listing was considered in the data categorization. In this context, the responses given to each question werecoded and sub-divided into related categories. For example, what school managers do for school development was divided into sub-themes such as strategic planning, school culture, school and environmental communication.
3.- The expressions that had been encoded in the conceptual dimension were logically and conceptually assembled. The data was defined comprehensibly and unnecessary repetition was avoided.
4.- The results were described at the last stage and data were defined based on the related and specific cases.

The researcher, the thesis supervisor and a faculty member who is an expert on qualitative research methods coded the field notes into the text distinctly and compared the interview documents; necessary corrections were made to the subjects with 'consensus' and ' disagreement ' and the percentage of numerical coding was reached[17]. The percentage of numbness, which was suggested by Miles & Huberman[18], was used for the coding reliability calculation of the study. Reliability=Consensus/ (Consensus + Disagreement). More than 70% of reliability calculations are considered to be reliable for research. The codes that are compatible with the codes made by the researcher, thesis

[13] M. Q. Patton, Nitel Araştırmave Değerlendirme Yöntemleri (Ankara: Pagem Akademi, 2014).
[14] M. Q. Patton, Nitel Araştırmave Değerlendirme Yöntemleri…
[15] A. Yıldırım & H. Şimşek, Sosyal Bilimlerde Nitel Araştırma Yöntemleri 8 baskı (Ankara: Seçkinyayıncılık, 2016).
[16] A. Yıldırım & H. Şimşek, Sosyal Bilimlerde Nitel Araştırma…
[17] M. Miles & A. M. Huberman, Nitel Veri Analizi (2 Baskı) (Ankara: Pagem Akademi, 2016).
[18] M. Miles & A. M. Huberman, Nitel Veri Analizi…

advisor and the instructor, who is expert in qualitative methods, are taken as basis in accessing the themes.

The opinions of the participants were presented in quotation marks, which the respondentswere given in parentheses with the codes. Pseudonyms were used for the school administrators, vice school managers, teachers, teachers' union representatives, senior representatives of the ministry due to confidentiality.

For example,'.....' (SA1)

SM: School Manager (Headmaster or a vice-principal), VSM: Vice school manager, T: Teacher,
TUR: Teacher Union Representative, SMM: Senior Manager of the Ministry

Validity and Reliability

The most commonly used criteria for convincing results in scientific research are validity and reliability. In qualitative research, 'validity' is related to the accuracy of scientific findings, and 'reliability' is related to the reproducibility of scientific findings[19].

The reliability and validity strategies used in this research:

1.- Comprehensive Field Study: Although the research was conducted intensively in April, May and June 2018, schools were visited both before and after the research date due to their researcher position. The researcher was found in the places where the research was conducted. Presence in the same environment enabled the establishment of a mutual trust, and the participants responded sincerely[20].

2.- Internal validity (Credibility): while developing the interview form to enhance the internal validity of the research, a conceptual framework has been established on the subject through the examination of the relevant field article. Three experts have been consulted for the research and interview questions. After the interviews with the participants in the field, participants' responses were transcribed and the written reports were sent to the participants to be evaluated and confirmed. Content analysis and themes have been determined on the written documents that have been approved. The results of the study were intended to be consistent and meaningful in itself, and the resulting categories were also aimed to be generalizable. Experts in qualitative research methods who have a general knowledge of the subject of research have been asked to examine the research through various dimensions and have received feedback[21].

3.- External Validity (Transferability): Explanations and clarifications have been stated for testing the findings in other studies. In order to generalize the research results to similar environments, the researcher explained all stages of the research (the research process and those involved in this process) in detail. The model of the study, how the profile of the study group was chosen (purposeful sampling), the characteristics of the participants (gender, age, educational status, etc.) and the environment were clearly

[19] A. Yıldırım & H. Şimşek, Sosyal Bilimlerde Nitel Araştırma…
[20] A. Yıldırım & H. Şimşek, Sosyal Bilimlerde Nitel Araştırma…
[21] J. Creswell, Nitel Araştırma Yöntemleri, Beş Yaklaşıma Göre Nitel Araştırmave Araştırma Deseni (3.Baskıdan Çeviri) (Ankara: Siyasal Kitapevi, 2016).

stated. The data in the research were collected via voice recording and the researcher's field notes. The perceptions of the participants were quoted and the results of the study were explained based on participants' responses[22].

4.- Reliability: In order to increase the internal reliability (consistency) of the research, the findings of the research were provided without any comments or interpretation. Based on the data obtained during the interview, the researcher, the supervisor and a lecturer who is expert on qualitative method have individually coded the data and the coding has been compared. In order to sustain internal reliability of the research, five randomly selected documents out of 70 documents were evaluated separately by the researcher, the supervisor and subject experts; and consistency was prioritized in the context of creating categories. According to Miles and Huberman's[23] formula, reliability = Consensus / (Consensus + Disagreement), the consistency between data processors (4/4 + 1) was found 80%. Thus, the study concluded that documents were measured reliably due to the 70% consistency value.

5.- Confirmability: In order to establish the external reliability of the study (confirmed), the researcher stated the results in detail and explained how the results were achieved clearly and comprehensively. The researcher clarified the purpose of this study, the expectations of the study, and the process of study (methods used, data collection tools, establishment of the data collection tool, raw data such as pilot interviews, voice recording data and researcher diary, analysis data (findings of the study)), and the formation of the findings[24]. In addition, the data were documented and stored in a way that could be analysed by others.

6.- Triangulation: One of the methods proposed in the field literature is triangulation in order to maintain the validity and quality of qualitative research[25]. Triangulation (diversification) is the practice of the researcher to increase the diversity of data collected during the research process and to include as many perspectives as possible in the research[26]. In order to ensure the credibility of the research, in other words the consistency, comprehensiveness and up-to-datedness of the results, triangulation method has been used as an ideal approach. In this study, multiple data collection methods were used, including interviews with semi-structured questions and a review of the researcher Journal; and various data sources from school principal, deputy principal, teacher, teacher union representative, Ministry senior managers were reviewed and the results were compared accordingly.

Findings

Views on the effects of socio-economic, cultural and technological changes in society on school management

Perceptions of school administrators on the effects of social, economic, cultural and technological changes on school management

[22] A. Yıldırım & H. Şimşek, Sosyal Bilimlerde Nitel Araştırma…
[23] M. Miles & A. M. Huberman, Nitel Veri Analizi…
[24] H. Başkale, "Nitel Araştırmalarda Geçerlik, Güvenilirlikve Örneklem Büyüklüğünün Belirlenmesi", Dokuz Eylül Üniversites ihemşirelik fakültesi Elektronik Dergi Vol: 9 num 1 (2016): 23-28.
[25] M. Yaşar, "Nitel Araştırmalarda Nitelik Sorunu", MSKU Eğitim Fakültesi Dergisi, Vol: 5 num 2 (2018): 55-73.
[26] M. Yaşar, "Nitel Araştırmalarda Nitelik Sorunu…

Participatory school principals f= 4, 22.22%, expressed an opinion on school management practices in parallel with social changes; and rules and regulations were reported to be insufficient.

> *"The disciplinary charter is very challenging. Let's say the child has committed an offense on the Internet, what would you do? He used inappropriate words for my family, what is the scope of it? None. We call the students, we speak, we try to explain how inappropriate this manner is and that it is a shame; they should rather communicate to solve their problems and not everything is meant to be dealt electronically. We explain the main purposes of using technology with the help of guidance counsellors. In fact, children were given a seminar on the use of the Internet, but our statutes are very lacking…. The ministry has started working on this issue, the end has been reached." (SM19)*
> *"There are incidents that were transferred to the police. We're trying to figure out what we can do at school, but our regulations are obsolete. We have written the last opinion to the ministry that is a great inconvenience. Problems need to be solved in school, but there is nothing clear that makes it difficult for managers all the time."(SM 12)*
> *"The current rules and regulations do not suffice to assess students' behaviours. The disciplinary regulations are from the 1990s. Nowadays, all of the children use smart phones that make them discover the world. They take selfies and share it on Facebook (social media). They insult their friends. We try to warn them about the uses of technology and smartphones. Obviously, we try to correct your misdeeds. There is no provision in the present statute. Another major problem is the students' outfits.... We're having trouble with male students' shaving problems. We warn a student to shave his beard, but the teacher has a beard. We say 'Don't wear earrings!', but the teacher wears earrings.I don't even want to even want to make any comments about some of our teachers ' outfits'" (SM 29)*

5.56% of school managers have expressed that they are implementing rules.

> "*We act with the rules, but these rules and regulations need to be updated. Although it was promised, lack of disciplinary regulation, admission to registration, and absence cause great distress. These must be taken care of. Our hands are tied." (SM 6).*

33.33%of the participating school principals F=6% have mentioned the use of mobile phones.

> "*In fact, none of the regulations fit today's world. However, the ministry is already working on this issue to establish a statute that would provide the schools with up-to date disciplinary cases. Once, we have given the internet password to the students, so they could use it for educational purposes. Unfortunately, we haven't seen any students using the Internet for educational purposes. Thus, we stopped giving them the password. There are many risks involved in using the phone in a classroom environment; but it was also possible to adapt technology to the class. It's a little utopian. It could be turned into an advantage in the following years. The students need to practice writing as it is a life time skill for them. In the high school, we ask students to write down the notes on the board, they take out their mobile phones and take a photo. I personally don't find it very objectionable. In*

> *high schools, we can take advantage of it. But we need to maintain that balance very well."* (SM 4)
> *"If we use technology correctly, it will help, but we need to use it for educational purposes rather than being stuck on social media. It is necessary to raise students' awareness on that aspect... I have read an article about that issue, I shared it with the guidance counsellors and they published it. We keep complaining about the children that they do not write or read. Thus, why don't we teach them to write a blog so he can use technology while learning. I agree with the fact that we can't take cell phones or tablets from the children. In order to solve this issue, let's teach children the good aspects of this technology." (SM 26)*
> *"If the student has to bring his mobile phone(some parents insist), during school hours, it has to be kept in the school bag and the student can use it after the school. For the sake of communication, our school's phones are open to student use. Students can use them anytime they need. Especially at recess, they can use it for free; and texting is also available. We use Smart School in administrative management." (SM20)*

23.53% of the participatory vice-principals f= 4, mentioned school management practices in parallel with social changes.

23.53% of the participatory vice-principals f=4, stated that the existing rules and regulations are inadequate in parallel with the social changes.

> "*One of our biggest deficiencies is that we consider education based on the laws and regulations. We focus on it. No one considers the changes in education, no one follows... We only consider what the law says or another the statute says. On the other hand,the world develops although none of the rules and regulations are outdated. Our biggest problem is to try to solve everything according to the rules and regulations. But laws and regulations don't solve everything. Because we are in the school environment not the court.Each student has different psychological status, needs, different family concerns.We can't handle everything in school with the law and the regulations. It doesn't fit, but we try to make it fit. Since we aim to deal with the problems with the law and the regulations, we face difficulties. We sometimes face with other problems including individual problems that we never expect."* (VSM16)
> "*The current regulations can't solve the problems. We have written our suggestions on the disciplinary regulations. There is no penalty for many offenses in the statute. We try to make it up to something. We have offered our proposals for the update, but it is still insufficient and not effective. And suspension is ridiculous. Instead, if there is an offense that a student causes, we may give a garbage bag to the student ask him/her to clean the school yard, and so on. However, this is not a part of the disciplinary statute. Penalties such as laboratory cleaning, school cleaning may also be added. We may have the school's library organized by the student. Let him do something voluntarily at school. I try to get the students to do such things when they cause troubles. Someone might object. For example, last year, I made them come and paint my office…"* (VSM 23)

% 23.53% of the participatory vice-principals f=4, have emphasized the use of mobile phones.

> "*Positive use of the internet is something useful. On the other hand, the change of society has an influence on students. There are restrictions on the phone at this school. We gather the mobile phones in the morning and*

give it to the students at noon. It can't be controlled much at other times."(VSM 5)
"Our students have an advantage as they use the technology in front of their teachers as it is more controllable. The number young staff at school is also growing, and they are already aware of the particular issues when they start working here. "(VSM 3)
"Technology has brought convenience to our daily lives, but the use of mobile phones has come along with its drawbacks that allow our students to encounter in disciplinary cases. They curse at each other and they also take photos of their friends and post them without telling their friends. They've always used it for bad reasons. I wish using phone at schools could be banned..." (VSM 33)

Teachers ' perceptions on the impact of social,economic,cultural and technological changes in society on school management:

% 72.22.53 of the participatory teachers f=13, reported their opinions on the use of mobile phones.

"I perceive it as corruption."(T4)
"*The school is part of society and it does reflect the societal structure. Technology is being used too much. The use of mobile phone is very popular among students. Instead of talking to each other, they communicate by texting. During the recess, they pick up their phones and play games. We're in a dilemma whether to ban the use of phone or not. However, we can't do anything due to the lack of current rules and regulations."* (T8)
"IT technology law must be enacted by the Assembly. Society is already gone out of control. We could not limit the use of mobile phones for children. There are some schools that do it but I don't know how they handle the case. But, mobile phone is like a ticking bomb... We try to use initiative towards theseissues, we try to solve the problem without giving penalty and by using humorous language. However, this is a serious deficiency and gap in the statute." (T 10)
"I think technology has captured all of us at some point. I think it should be banned in schools across the country. I don't think it should be used in schools. And in our school, you can see everybody using mobile phones from the oldest to the youngest." (T 15)
"We have been having a trouble with the use of mobile phones. They text each other during the lesson, and they even took a photo of the teacher's dress while she was lecturing. We still couldn't take any precautions to avoid such incidents. We decided to bring closed boxes and ask the students to hand in their phones before the class and collect when they are done with their lessons. Although 9th and 10th gradesobeyed the rule, 11th and 12th grade students didn't drop their mobile phones, we couldn't get their phones. The decision was taken by school administrators and teachers on the board, but we did not succeed. The students said that 'you don't have the right, you can't touch my phone.' Thus, this regulation failed upon the rebellion of the students." (T16)
"The use of mobile phones is very common and we cannot help it. They don't use it in the class, but their minds are busy with their mobile phones. They either play games or text. Mobile phones should be banned or something else should be done. But there's got to be a solution. Children are not educated about the use of mobile phones. When they are assigned a homework, they do not know how to use the Internet accordingly when they are quite confident about the use of the Internet for other purposes" (T17)

> *"The students need to be more conscious about using communication technology. As far as I'm concerned, families do not put enough emphasis on this issue... Besides, effects of the changes in society cannot be denied. Especially, the children of divorced families are out of control. There is a tendency of imitating whatever they are exposed to without thinking. It should be more controlled." (T2)*
> "*Mobile phones need to be banned in schools. In fact, using mobile phones prevent the child from socializing. It also disrupts their relationships. Last week, we had a traditional games day that was organized with the arts teachers. We can see in the photographs that the principal, the teacher and the student did it together. It is very important for a student to share something with his teacher. Even playing football with children during recess is important in terms of establishing a mutual ground with children." (T 11)*

Two of the participating teachers, %11.11, expressed their opinion on the current regulations in the reflection of social changes to the school.

> "*Yes, there are no laws on how to punish some misbehaviours. In this case, nothing can be done.*"(T3.)
> "*There is a permanent staff, but recently a different working culture has started to be developed. The teachers say that 'I come, teach and whenever I'm done with teaching, I leave'. I believe that this is a wrong approach and should be changed.Thus, the administration is experiencing difficulties due to several reasons; in order to deal with such cases, the administration should be stricter but the administration cannot do anything due to the gap in the statute. However, there are some teachers who say"my schedule determines my working hours". It may also be because of the little number of the staff who work at our school, when the teachers go to the class, only a few teachers stay in the staff room. Thus, rather than staying alone in the office, they prefer to go home. They stay at the school only on their duty days." (T8)*

Perceptions of teacher union representatives on the effects of social,economic,cultural and technological changes in society on school management:

41.67% of the participating representatives of teacher union f=5, expressed an opinion on the use of mobile phones.

> *"Today's children embed technology in every aspects of their lives and we cannot catch up with it. However, we need to catch up a bit and use the internet to attract their attention. But unfortunately, we can make use of it. If we can implement technology in teaching, students will be more efficient and motivated.*"(TUR 1)
> *"In our school, the students are allowed to use mobile phones. We provide them with the WI-FI passwordbut there is only one solid rule that they have to obey: During the lesson, if someone's phone rings or the student is engaged in action on the phone, the phone is taken by the teacher and will only be returned with their transcripts at the end of the semester. We're not against technology, and we even help students with technology through the internet. However, we have strict rules regarding the boundaries of using it*."(TUR 3)
> *"Some families have financial difficulties. Although the economy is bad, all of the children have mobile phones. The administration has banned using*

> *mobile phone, but I'm against it; and I have mentioned it to the administration as well. If you put limitations, it will be more appealing for the students. I think it would be more beneficial if we set certain limitations for the use of mobile phone, a cupboardcould be placed in each classroom to put students' phones during the lessons. Even though it was forbidden, our students were very comfortable with using it. Although a student's phone was taken totaken to the administration, another student could play with his phone in front of the administration. Thus, making mobile phones forbidden is not an effective way, so we just ignore the students playing with their mobile phones."*(TUR8)
>
> *"Let me share my experience at a school that I used to teach. I was really shocked. The classroom environment was so different that I could feel the effect of changing society structure on students and education. However, the case in our school is much better,we still have families who are concerned about their children's education. I think, as teachers, we're lucky to teach at this school. But we can still feel the impact of the changing society, and we are affected by the use of mobile phones as the whole society. People are busy with their mobile phones even when they are driving."(*TUR 9)

16.67% of the participating teacher union representatives F=2 expressed their views on laws and regulations in parallel with social changes.

> *"I think the first thing to be developed is the disciplinary charter. The disciplinary regulation should be evaluated and amended by the ministry and union officials."* (TUR 2)
>
> *'I can see that social change is a serious movement as an individual who graduated from high school in 1996.This change can be observed in student-teacher,teacher - teacher and parent –teacher relations at school…This has reached a very different dimension with the population from outside that came to the island for various reasons...and this also contributed to the transformation of society. After 2000, our island was influenced by globalization, and as of 2018, there were social developments with the presence of more than 100,000 international students. The reflection of these social developments on education can be observed in various dimensions. The president of YÖDAKhas announced that since 2015, 70% of high school graduates across the island goes to university. These are official figures.....On this scale, Western Europe has been shown that there is no university in this scale. As an island, the social trauma that the entrance and exit from the university may cause is also serious. It's not just the population of society that changes here. At home, the relationship between parents, technology are also influenced ... some children are given everything they can imagine through a smart phone. In many cases, individuals spend time without goals due to misuse of technology." (TUR 4)*

The ministry has not expressed any opinion on this subject.

School administrators ' views on technology use and compliance:

55.56 % of the participating school principals F=10, expressed an opinion on the use and compliance of technology.

> "*In fact, none of the regulations fit today's world. However, the ministry is already working on this issue to establish a statute that would provide the schools with up-to date disciplinary cases. Once, we have given the internet*

> *password to the students, so they could use it for educational purposes. Unfortunately, we haven't seen any students using the Internet for educational purposes. Thus, we stopped giving them the password. There are many risks involved in using the phone in a classroom environment; but it was also possible to adapt technology to the class. It's a little utopian. It could be turned into an advantage in the following years. The students need to practice writing as it is a life time skill for them. In the high school, we ask students to write down the notes on the board, they take out their mobile phones and take a photo. I personally don't find it very objectionable. In high schools, we can take advantage of it. But we need to maintain that balance very well."* (SM 4)
>
> "*The interactive smart boards have been set up for two years. Unfortunately, it's not used as much as it was intended to be. The lab is not used much either due to the education system. Our education system is based on university entrance exam. Thus, making practise and consolidation are not emphasized. The students think that going to the lab is a waste of time. Even the number of experiments in the books are reduced." (SM 13)*
>
> *"We use the portal in administration. When we first came, all the smart boards had a virus. We looked for a funding to upload the anti-virus program. We would encourage the use of smart boards. Our school has a computer language lab. We encourage our students to have an access to the language programs and use it. The use of technology is very important in education. Using the textbooks is considered as old-fashioned. I encourage education using visual technology." (OY35)*
>
> *"Unless the phone rings in the class, or the student plays with the phone, we don't take any legal action. We can't stop students from bringing cell phones. Now, when we collect their phones, we send a message through smart school. If the parents come, we give the phone immediately. If s/he doesn't show up, we keep it for a week in our vault." (OY 25)*

Teachers ' views on technology use and compliance:

11.11% of the participant teachers F=2 expressed their views on the use and compliance of technology.

> *"Within the school infrastructure, there is a computer laboratory, a science laboratory, a suitable environment for education, smart boards that teachers need to be trained in this area. Last year we had our smart boards, but havinga conversation with children revealed that only a few teachers use them. I started to use it immediately after we had had them. However, the children say that "we don't use it, it is more like an accessory in the class." (T3)*
>
> *"Smart boards should be used to improve education and teaching .However, it is observed that only 30% of the teachers uses it."(T13)*

Views of teacher union representatives on technology use and compliance:

50% of the participant teachers' union representatives f=6 expressed their views on the use and compliance of technology.

> *"There are smart boards, we have also attended arranged trainings on how to use smart boards. But this is a different school. When we turn on the smart board, there are some students who may attempt to tear it apart. In a school with children who do not know what air conditioner is, who break the*

> *air conditioner, and who open the window and turn on the air condition at the same time, we cannot make use of the smart board."* (TUR 6)
> *"There are smart boards but I don't think they are used efficiently. Due to the deficiencies at school and poor internet connection, we cannot use the smart board in the class.Today's children embed technology in every aspects of their lives and we cannot catch up with it. However, we need to catch up a bit and use the internet to attract their attention. But unfortunately, we can make use of it. If we can implement technology in teaching, students will be more efficient and motivated*." (TUR 1)

Conclusion and recommendations

The education system aims to graduate young people as individuals who can use information technology, question,investigate and set lifelong learning as a goal. For this purpose,school principals should determine vision and mission for their schools, prepare educational curriculum and educational environment, and base all planning activities on them. During the implementation of curricula programs determined by the Ministry of National Education and Culture, the use of teaching supporting educational technologies and studies that improve school culture should be carried out. In addition, teachers should be led by education. School administrators stated that managers should participate in in-service training at the beginning of each academic year on the legislation on education which changes very frequently. In particular, newly appointed managers need to receive in-service training on how to implement these laws and regulations. It was also emphasized that managers need to be trained in communication technology and computer.

It can be seen that change is happening rapidly in all aspects of our society. Mobile devices have turned into broadcast media thanks to the integration of mobile devices into social networks[27]. Information and technology-oriented developments have led to transformations in social structures. This transformation establishes changes in educational periods, school types and educational programs. Education systems with the requirements of the new century and 'lifelong learning for all ' approach; it is transformed into a structure that values every human being, teaches ways and methods of reaching information, includes effective guidance service, enables horizontal and vertical transitions, complies with market, professional standards, sees computer technology as a part of Life and focuses on production, takes into consideration the equality of opportunity'[28]. Since 1990s, it has been observed that education systems in developed countries have a tendency to rearrange with a lifelong learning approach and to bring about the developments in this field.

The objectives of the new education; to educate individuals with the qualifications required by the information age, to implement student-centred education system, to reorganize the Turkish education system in a unity and harmony by taking into consideration the equality of opportunity with the lifelong education approach, to ensure consistency between the European Union and Turkey by raising the education period to 12 years, to enable students to benefit from the new methods of distance education and advanced technologies by using computer technology. In addition, to create an

[27] S. Çöteli, "The Impact of New Media on The Forms of Culture: Digital Identity and Digital Culture". Online Journal of Communication and Media Technologies, Vol: 9 num 2 (2019). https://doi.org/10.29333/ojcmt/5765

[28] Talim Terbiye Dairesi, M. Kıbrıs Türk Eğitim Sistemi. 2005.

educational structure based on the 'type of program' rather than the 'type of school' in secondary education, to enable the students to reach the vocational programs providing authorization certificates, to ensure the dissemination of education, to ensure the program integrity between vocational and technical secondary education and vocational high schools, to train the teachers and administrators on the new education system and to continuously implement in-service training to improve skills, to promote the education system, and to ensure continuous development by adhering to the principles of equality ,accessibility[29].

In parallel with the rapid social, political, economic and technological transformations experienced today, school environments have changed and the roles and duties of the school administrators (directors) who manage the school have changed and improved. In the case of changing environmental conditions, school principals are able to acquire leadership skills and manage their schools effectively only through specific training programs and well-structured education. Hallinger[30] states that there is a focus on knowledge and skills such as problem solving, creative thinking, lifelong learning, technology literacy that are required by the 21st century in the upbringing of school leaders. The vice-principals (f = 5, 31.22%) and some of the teachers (f= 5, 33.33%) stated that school administrators need training in recognizing the student profile and psychology. In the information age, due to the changing social, economic, cultural and technological structure, the student profile has also changed; thus, our existing knowledge on psychology is insufficient and that school administrators need training to get to know the students better. On the other hand, teacher union representatives (f = 3, 27.27%) stated that managers need training on student and teacher profile and student psychology.

Regarding the reflection of social, economic, cultural and technological changes in society to school management, school principals (f= 4, 27.78%), vice-principals (F= 6% 33.34%), teachers (f=2, 11.1%) and teacher union representatives (f=2% 16.67%) stated that the existing laws and regulations were inadequate, especially the student disciplinary code was insufficient to solve the student's problems and deal with disciplinary offenses. The school administrators stated that changes in education haven't been concerned and the education was considered based on the laws and regulations; it was also emphasized that the laws and regulations are outdated[31].The participants stated that social change is reflected in social relations, that mobile phones exist in all aspects of our lives, and that the use of mobile phones also leads to an unfavourable waste of time. Some participating school principals collect and issue phones from students when they enter and leave the school, so that the phone is not used in schools. On the other hand, some school principals allow the students to keep their phones with them, and aim to raise their awareness on the purposeful use of technology. Some of the teachers claimed that the students communicate with the mobile phone instead of talking, they play with the mobile phone during breaks;thus, mobile phones prevent the students from socialization[32].

[29] F. Altinay; G. Dagli and Z. Altinay, "Role of technology and management in tolerance and reconciliation education", International Journal of Methodology, Vol: 15 num 3 (2017): 68-72.

[30] P. Hallinger, Leading Educational Change: Reflections On The Pratice of Instructional and Transformational. Leadership". Cambridge Journal of Education, Vol: 33 num 3 (2003): 330-351..

[31] F. Altınay; M. Altınay; G. Dagli and Z. Altınay, "Being leader in global citizenship at the information technology age". Qual Quant Vol: 52 supp. 1 (2018) https://doi.org/10.1007/s11135-017-0585-5

[32] F. Aksal Altınay, "Are Headmasters Digital Leaders in School Culture?", Education and Science, Vol: 40 num 182 (2015): 77-86.

School principals (F= 7, 38.89%), vice principals (F= 3, 17.65%), teachers (F= 5, 27.98%) and teachers' union representatives (F= 4, 33.33%) have stated that the students from other countries have language and adaptation problems in schools.

Most of the school managers involved in the study use the smart school program in the administration and the teachers are also encouraged to use this program. In this sense, it can be said that school managers closely follow educational technologies. However, there are also schools that still use the portal developed by the ministry.

It was concluded that smart boards are not used in classrooms at the desired level. Only one of the schools participating in the research uses smart boards. Regarding the reason for insufficient use of smart boards in teaching, the school principals have claimed that the internet network was not connected to the classrooms. In addition, one of the attendants stated that the boards were infected with virus. One of the school administrators stated that teachers were trained on smart boards but the outcome was still not as satisfactory as it was expected.One of the teachers stated that language laboratories are suitable for education and that there are smart boards, but teachers should be trained on how to use the smart boardeffectively and only a few teachers should use them[33].

References

Açıkalın, A. Toplumsal Kurumsalve Teknik Yönleriyle Okul Yöneticiliği. Pagem. 1998.

Agut, S.; Grau, R. & Peiro, J. "Individual And Contextual İnfluences On Managerial Competency Needs". Journal of Management Development, Vol: 22 num 10 (2003): 906-918 https://doi.org/10.1108/02621710310505494.

Aksal Altınay, F. "Are Headmasters Digital Leaders in School Culture?". Education and Science, Vol: 40 num 182 (2015): 77-86.

Altınay, F.; Altınay, M.; Dagli, G. and Altınay, Z. "Being leader in global citizenship at the information technology age". Qual Quant Vol: 52 supp. 1 (2018) https://doi.org/10.1007/s11135-017-0585-5

Altinay, F.; Dagli, G. and Altinay, Z. "Role of technology and management in tolerance and reconciliation education". International Journal of Methodology, Vol: 15 num 3 (2017): 68-72.

Aytaç, T. Eğitim Yönetiminde Yeni Paradigmalar Okul Merkezli Yönetim. Ankara: Nobel Yayın Dağıtım. 2000.

Balay, R. "Küreselleşme, Bilgi Toplumuve Eğitim". Ankara Üniversitesi Eğitim Bilimleri Fakültesi, Vol: 37 num 2 (2004): 61-82.

Başkale, H. "Nitel Araştırmalarda Geçerlik, Güvenilirlikve Örneklem Büyüklüğünün Belirlenmesi". Dokuz Eylül Üniversites ihemşirelik fakültesi Elektronik Dergi Vol: 9 num 1 (2016): 23-28.

[33] F. Altinay; G. Dagli and Z. Altinay, "Role of technology and management…

Çalık, T. & Kılınç, A. “Öğretim Lideri Olmanın Anlamınaİlişkin Fenomenolojik Bir Araştırma”. Eğitim Kuramve Uygulama Araştırmalarıdergisi, Vol: 4 num 1 (2018): 1-13.

Çöteli, S. “The Impact of New Media on The Forms of Culture: Digital Identity and Digital Culture”. Online Journal of Communication and Media Technologies, Vol: 9 num 2 (2019). https://doi.org/10.29333/ojcmt/5765

Creswell, J. Nitel Araştırma Yöntemleri, Beş Yaklaşıma Göre Nitel Araştırmave Araştırma Deseni (3.Baskıdan Çeviri). Ankara: Siyasal Kitapevi. 2016.

Ekici, G.; Abide, Ö.; Canbolat, Y. & Öztürk, A. “Yüzyılbecerlerine Ait verikaynaklarının Analizi”. Eğitimve Öğretim Araştırmaları Dergisi, Vol: 6 num 12 (2016): 124-134.

Hallinger, P. “Leading Educational Change: Reflections On The Pratice of Instructional and Transformational. Leadership”. Cambridge Journal of Education, Vol: 33 num 3 (2003): 330-351.

Miles, M. & Huberman, A. M. Nitel Veri Analizi (2 Baskı). Ankara: Pagem Akademi. 2016.

Özden, Y. Eğitimde Yeni Değerler Eğitimde Dönüşüm 7. Baskı: Pagem Akademi. 2008.

Patton, M. Q. Nitel Araştırmave Değerlendirme Yöntemleri. Ankara: Pagem Akademi. 2014.

Şahin, İ. İlköğretim OkulMüdürlerinin Okul Geliştirme Stratejilerive UygulamalarınaİlişkinGörüşleri. 2013.

Talim Terbiye Dairesi, M. Kıbrıs Türk Eğitim Sistemi. 2005.

Yalçın, S. “Yüzyıl Becerilerive Bu Becerilerin Ölçülmesinde Kullanılan Araçlarve Yaklaşımlar”. Ankara Üniversitesi Eğitim Bilimleri FakültesiDergisi, Vol: 51 num 1 (2018): 183-201.

Yaşar, M. “Nitel Araştırmalarda Nitelik Sorunu”. MSKU Eğitim Fakültesi Dergisi, Vol: 5 num 2 (2018): 55-73.

Yıldırım, A. & Şimşek, H. Sosyal Bilimlerde Nitel Araştırma Yöntemleri 8 baskı. Ankara: Seçkinyayıncılık. 2016.

Yıldırım, N. Okul Gelişimi. S. Editör Özdemiriçinde, Eğitim Yönetiminde Kuramve Uygulama (s. 355-380). Ankara: Pagem Akademi. 2013.

.