



Identifying the Opinions of High School Administrators on Innovation and Its Implementations in Education*

Murat TAŞDAN**, Sabri GÜNGÖR***, Ziyaeddin Halid İPEK****

Article Information	ABSTRACT
Geliş Tarihi: 11.01.2020	The purpose of this study is to identify the perspectives of high school administrators and reveal the opinions of schools and school administrators about the innovational competencies. The phenomenological design was used to reveal the opinions of eight school administrators about the innovation concept in depth. The focus group interview technique was also used to collect the data. Content analysis and descriptive analysis techniques were implemented to analyze the data properly. As a result, it was found that the school administrators had difficulty defining the innovation concept. It is also stated by administrators that there is not a suitable environment to improve innovative actions and legal regulations and lack of beliefs restrict them from it. At the end of the research, it can be recommended that the instructions to increase the knowledge and experiences of the school administrators about innovation concept and process should be carried out.
Kabul Tarihi: 11.01.2021	
Erken Görünüm Tarihi: 20.01.2021	
Basım Tarihi: 30.04.2022	
	Keywords: Innovation, innovation in education, innovation in high schools, innovation for school administration

Okul Yöneticilerinin Eğitimde İnovasyon ve Uygulamalarına İlişkin Görüşlerinin Belirlenmesi

Makale Bilgisi	ÖZET
Received: 11.01.2020	Bu çalışmanın amacı lise okul müdürlerinin inovasyon ve inovasyon yeterlilikleri hakkındaki düşüncelerini belirlemek ve ortaya çıkarmaktır. Çalışmada nitel araştırma yöntemi ve fenomenoloji deseni, sekiz adet okul müdürünün inovasyon hakkındaki düşüncelerini ortaya çıkarmak amacı ile kullanılmıştır. Çalışmada verilerin toplanması için ise odak grup görüşme tekniği kullanılmıştır. Odak grup görüşmesi sonucu ortaya çıkan verileri analiz etmek için ise nitel analiz yöntemlerinden olan betimsel ve içerik analizi kullanılmıştır. Çalışmanın sonucunda okul müdürlerinin inovasyon kavramını tanımlamakta zorluk yaşadıkları görülmüştür. Aynı zamanda okul müdürleri inovasyon için uygun ortam bulunmadığını ve yasal düzenlemeler ile isteksizliğin inovasyon uygulamaları gerçekleştirmekte onları engellediğini belirtmişlerdir. Araştırmanın sonunda öğretmenlerin inovasyon kavramı hakkındaki bilgileri ve becerilerini artırmak için dersler verilmesi ve inovasyonu engelleyen yasal düzenlemeleri ortadan kaldırarak inovasyonu özendiren düzenlemeler yapılması tavsiye edilmektedir.
Accepted: 11.01.2021	
Online First: 20.01.2021	
Published: 30.04.2022	
	Anahtar sözcükler: İnovasyon, eğitimde inovasyon, lisede inovasyon, okul müdürleri için inovasyon
doi: 10.16986/HUJE.2021066895	Makale Türü (Article Type): Araştırma Makalesi

Kaynakça Gösterimi: Taşdan, M., Güngör, S., & İpek, Z. H. (2022). Okul yöneticilerinin eğitimde inovasyon ve uygulamalarına ilişkin görüşlerinin belirlenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 37(2), 669-683. doi: 10.16986/HUJE.2021066895

Citation Information: Taşdan, M., Güngör, S., & İpek, Z. H. (2022). Identifying the opinions of high school administrators on innovation and its implementations in education. *Hacettepe University Journal of Education*, 37(2), 669-683. doi: 10.16986/HUJE.2021066895

1. INTRODUCTION

The era that we are in is called the digital age according to the developments in the fields of communication and information. This digital age requires a whole understanding of technology and using technology for the purpose of people's own benefits.

* This study was presented as a conference paper in 27th International Conference on Education Sciences on April 19, 2018. The ethical consent was received from Ethical Committee of Kafkas University on 12 March, 2019 with the number of 28644117-905.02/01.

** Prof. Dr., Kafkas University, Faculty of Education, Department of Educational Sciences, Kars-TURKEY. e-mail: murattasdan@gmail.com (ORCID: 0000-0001-8675-6068)

*** Assoc. Prof. Dr., Kafkas University, Faculty of Education, Department of Educational Sciences, Kars/TURKEY. e-mail: sabrigungor@gmail.com (ORCID: 0000-0002-0254-1885)

**** Res. Asst., Kafkas University, Faculty of Education, Department of Educational Sciences, Kars/TURKEY. e-mail: ziyahalidi@gmail.com (ORCID: 0000-0003-1313-7770)

The technological transformation happening in the era of digitalization also affects education and schools as it affects many other fields. The education environments are reshaped with this technological transformation. Opinions and competencies of school administrators in the technologic transformation process which occurs in the classrooms and schools are crucial for the success of the process. Therefore, the school administrators should have the necessary vision to lead the school and leadership skills for those who see them as a part of school in order to carry out the transformation process in the school efficiently.

1.1. Innovation Concept

Innovation comes across as an important concept involving novelty and change. The concept has become progressively common in daily life, business, and education (Kurtuluş, 2012). Innovation has been defined as "a new method, idea or product" in the English dictionary (Oxford, 2018), however, it is defined as "the behavior of an individual who adopts new methods in social, cultural and administrative environments in order to adapt innovation and changing conditions" in the Turkish dictionary (TDK, 2020). Innovation is derived from the Latin word "*innovatus*". Innovation also means "adopting new methods in social, cultural and administrative environments". In the Oslo Manual, a joint publication by OECD and Eurostat (2005), innovation is defined as "the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. In fact, these definitions suggest that there is no universally accepted definition of innovation (Goswami and Mathew, 2005). Researchers have been describing innovation in different ways based on their fields. For example, Rogers (2003) describes innovation in communication as "an idea, practice or project that is perceived as new by an individual or other unit, while social network analyst Plessis (2007, s.21 as cited in Sweeney, 2016) identifies innovation "as creation of new knowledge and ideas to facilitate new business outcomes, aimed at improving internal business processes and structures and to create market-driven products and services ". According to Management Information scientists Baregheh, Rowley and Sambrook (2009) "innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service and processes, in order to advance, compete and differentiate themselves successfully in their marketplace. For economist Schumpeter, innovation refers to the formation of a new product or production method by any market, sector, or organization. (Schumpeter, 1934, s.66, as cited in Ruttan, 1959). Innovation and invention are the concepts that are often confused. Innovation is a concept that can stand without invention and invention alone does not constitute innovation. Economically and socially, invention has been seen as a different point from innovation process. (Schumpeter, 1934, s. 84, as cited in Ruttan, 1959).

1.2. Innovation in Education

The changes and innovation movements on a global scale point to the need for innovation in education as well. Innovation is nurtured and developed by the knowledge, skill, talent, and creativity of individuals. These competencies are acquired through education (Looney, 2009). In this context, a reciprocal relationship can be seen between education and innovation concepts. Oslo Manual (OECD and Eurostat, 2005) suggests that there have been four types of innovation. These are product, process, organizational, and marketing innovations. Education covers all of these innovations. Methods like curriculum development and e-learning are examples of product innovation, sharing information with parents and students through information technologies is an example of organizational innovation and also charging for various vocational courses can be an example of marketing innovation (Lubienski, 2009).

It is seen that there are four types of innovation that can be applied to school administration. a) Service innovation: This kind of innovation includes a new type of service. School services develop some service applications throughout school like e-payment for personnel and online payment of school fees innovations. b) Process innovation: This innovation type states a new way of presentation of developed or new service. Process innovation in school aims to provide a presentation of service, increase quality and decrease unit cost. Typical process innovation includes new ways of teaching techniques and doing computer-based exams. c) Marketing innovation: Marketing innovation covers the important new marketing techniques which include crucial changes, presentation of the product, and its pricing. d) Organizational innovation: This innovation requires using new ways of organizational techniques, customer satisfaction, and good human relationships. The ultimate purpose of this innovation is to enhance the efficacy, loyalty, and participation throughout employees (Akpan, 2016).

Organizational dimensions of innovation in schools differ according to the perspectives of teachers. Hsiao, Chang, Sung, Chen (2009) described school innovation in 6 different dimensions: organizational management, human resources management, marketing management, customer relations management, financial management, and research and development management. On the other hand, Wu (2006) separates school innovation into five different dimensions: administrative innovation, teaching innovation, teacher sharing innovation, foreign relations innovation, and computer based innovation. Lee (2005), however, described innovation as school organization innovation, educational behavior innovation, equipment-resource innovation, organizational climate innovation, and administrative operation innovation.

The increased need for raising achievement levels and ensuring greater equity of outcomes for all students, changes in work life and social life, rapidly advancing technologies, and the need to motivate and engage students are the driving forces for innovation in education (Looney, 2009). Innovation in education services is intended for research and development-based investments and also for finding solutions for consumer needs. The innovation in education doesn't aim for the accumulation of knowledge, it aims for the flow of knowledge and accessing this knowledge in the easiest way possible (Lubienski, 2009). Lee

(2005) suggests that the four structures of school organizational innovation are instructional behavior, facility resource innovation, organizational climate innovation, and administration innovation. Wu (2006) states that school organizational innovation leads to results in innovation opportunities and activities according to school vision and educational objectives. By analyzing the strengths, weaknesses, opportunities, and threats of school organizations, it evaluates the feasibility of innovation to enhance school operation. For Yan and Chang (2005) a school innovation operation means that the schools build an organizational culture and environment for the creativity development of the members in order to improve educational performance. Staff members are encouraged and guided to participate in innovation activities. Through knowledge system management and operation, the schools b the creativity by using systematic operational strategy to develop the dynamic process of sustainable operation. Hsiao, Chen, Chang, Chou and Shen (2009) identified seven aspects of school organizational innovation in a study they carried out in order to explore the factors influencing the organizational innovation in technical institutes and universities. Leadership innovation, administration innovation, student affairs innovation, curriculum and instruction innovation, the teachers' professional development innovation, resource application innovation and campus make up these seven aspects. The school administration should encourage innovation in new educational environments to construct educational innovation and organizational innovation. School administration leaders guide teachers to develop a new school activity and implement an innovative instructional approach (Hsiao, Chang, Sung and Chen, 2009). The key factors of school organizational innovation for technical institutes and universities are the leadership innovation and also the curriculum and instructional innovation. Current theories of school organizational innovation have been based on theories of business organizational innovation. However, different organizational objectives and demands, different organizational structures, different organizational member relationships and different decision-making models between schools and organizations exist, in addition to different internal and external factors affecting the organization in general (Hsiao, Chen, Chang, Chou and Shen, 2009). These differences should be considered in innovation applications when organizational theories are implemented to educational organizations.

Gilad-Hai and Somech's (2016) study "the Organizational Consequences of Innovation Implementation in Experimental Schools" explores the individual and the school level outcomes (social cohesion, emotional conflict, organizational innovation) of innovation five years after the implementation. At the end of the study, student success levels, social cohesion and organizational effectiveness proved to be higher than the schools that didn't implement innovation; additionally, lower emotional conflict and strain levels were reported in innovation implemented schools. In order to investigate the relationship between the impact of school innovations practices and school leaders' entrepreneurial leadership.

Pihie, Asimiran and Bagheri (2014) conducted a study involving 294 Malaysian secondary school teachers in Malaysia which concluded that principals showed moderate success in implementing innovation and entrepreneurial leadership is highly important in the process of innovation. Conducted by interviewing 981 vocational high school teachers, Kang and Park's (2012) study found that the effects of leadership styles of administrators on school innovations are important for the implementations of changes and innovation to succeed with regard to innovative school climate and leadership style. The study titled "School innovation: The mutual impacts of organizational learning and creativity" by McCharen, Song and Martens (2011) identified the driving factors for the innovation process in schools as the cultural determinants of organizational learning and knowledge creation practices. The study found that being restricted by pressure mechanisms such as bureaucracy and rules are the important factors hindering the innovation for teachers. Collaboration for organizational knowledge creation and innovation for learning culture were observed to be factors supporting innovation. Dibbon and Pollock (2007) analyzed innovation processes in schools where innovation is implemented. Dibbon and Pollock (2007) found out that if the teachers in schools where innovation culture is established didn't have enough self-confidence and competency with regard to information and communication technology, the innovation process could not be achieved entirely, however the teachers and administrators were observed to be proceeding with learning and teaching activities at the same time.

A review of related knowledge base shows that the subject of innovation has been addressed by different researchers from various disciplines. Dibbon and Pollock's (2007) innovation processes in innovation implemented schools; McCharen, Song and Martens' (2011) School innovation: The mutual impacts of organizational learning and creativity; Kang and Park's(2012) the effects of leadership style on school innovation; Pihie, Asimiran and Bagheri's (2014) the relationship between effectiveness of innovation implemented in schools and entrepreneurial leadership; Gilad-Hai and Somech's (2016) effects of innovations on individual and school level (social cohesion, emotional conflict, organizational innovation); Bennet, Lockyer and Agostinho's (2018) towards sustainable technology-enhanced innovation in higher education; Çelik's (2016) evaluation of PhD thesis on innovation by content analysis; Kurtuluş's (2012) perspective and competency of teachers and students on innovation; Erdemet's (2017) experiences of principals assigned in high schools in innovation process.

Payago and Phumphongkhochasorn (2020) aimed to develop a new innovative school management model for 18 secondary school state offices, and also aim to suggest a new model to it. In the results of the research, four staged innovative school model was determined according to opinions of 50 school administrators and teachers. Besides that, school administrations' innovation level was determined to be high in general innovation. Chou, Hsiao, Shen and Chen (2010) intended to create new indicators of organizational innovation in institutes and technical universities. This study revealed seven different perspectives of school organizational innovation. These are: leadership innovation, management innovation, student counselling innovation, curriculum and teaching innovation, teacher professional development innovation, resource application innovation and campus construction innovation. Sagir (2017) investigated the innovative leadership of the school administrators. In light of the data

collected from 111 school leaders, it was seen that three distinctive innovative leadership behaviors were determined. These are “encouraging innovation”, “following innovation process” and “applying innovation”. It was also captured that school administrators showed the most innovative behaviors in the schools. Akın (2016) researched the opinions of the school administrators of schools under the Ministry of National Education (MNE) of Turkey about the new innovation attempts in schools. According to the results, the MNE made many innovative attempts targeting the schools, yet the results indicated that attempts are not good enough and successful. There are problems about the innovations because they are made from the MNE in haste and they are not studied enough before the process. Zafer-Gunes (2016) also conducted a study about the relationship among innovation management, trust to school administrator and common leadership skills. At the end of the research, it was seen that there is a moderate, positive, and meaningful relationship between innovation in school administration and trust to school administrators. There was also a positive and meaningful relationship between shared leadership skills and school administration innovation.

Serdyukov (2017) stated that innovation in education has become a pressing issue as never before. Innovation in education has a highly critical role because of the need for creating a sustainable future. Transforming knowledge into information has become as important as having the ledge about education and society, in fact, it is much more important than having it. Developing new values in education and motivating students to learn is the most important role of the school. According to the organizational innovation indicators, teachers can provide better learning activities and inspire students in terms of education with help of school administrations. Innovative management of schools provides opportunities both for schools and students (Chen, Hsiao, Chang, Shen and Chou, 2010). Moreover, innovative applications in schools and innovative leadership of the school administrators increase teacher performance, school efficiency and enable innovation process in school (Park, 2012).

There has been almost an innovative pressure on educational objectives, processes and outcomes. In this transformation process, practices that include innovation objectives, processes and implementations have become much more important. The attitude and opinions of school administrators in creating innovative climates and culture, supporting teacher and student entrepreneurship and developing and implementing innovative practices in the whole process are rather important. Education leaders' attitudes affect vision and mission-making process. The literature analysis shows that innovation has been studied by the disciplines of life, health and social sciences and it has also been studied by educational sciences. However, literature analysis also reveals the limited number of studies evaluating the perspective of school administrators on innovation and innovation practices. Current study is considered important in terms of both its contribution to the theoretical information on educational sciences and to the practice on innovation implementation of education and school administrators.

The main aim of this study is to identify the perspectives of high school administrators and determine the opinions of schools and school administrators about the innovational competencies. Therefore, answers have been sought for the following sub-questions with this purpose.

- 1) What are the opinions of school administrators about the innovation concept and process?
- 2) What are the opinions of school administrators about the competencies of themselves and schools?
- 3) What are the opinions of school administrators about innovation implementations in schools?
- 4) What are the opinions of school administrators about factors that support and hinder innovation?

2. METHOD

2.1. Research Pattern

This research, which aims to evaluate the opinions of high school administrators in-depth about innovation, was carried out by qualitative method. As this study describes the innovation identified by school administrators and related experiences in-depth, phenomenological research approach was adopted. Data of the study was acquired by focus group technique which is a face-to-face small group technique. The primary reason for using focus group technique in this study was the insufficient number of studies on innovation, although it is a widely used concept, especially on school management. There is also another reason as indicated in Johnson and Christensen (2014) and Creswell (2014) that focus group technique was being used particularly in initial studies. In this study, attempts were made to explore the opinions of participants about innovation and their innovation experiences through the questions prepared within the context of the purpose.

2.2. Research Group

The purposeful research sampling was used to determine participants who serve the purpose of the research and provide information according to it (Cresswell, 2014, p.189; Johnson and Christensen, 2014, p.235). Demographic information about the participants was provided in Table 1 in order to understand and explain the innovation experiences of participants better.

Table 1.

Personal Information about the Participants

Variable	K1	K2	K3	K4	K5	K6	K7	K8
Age	45	54	40	34	32	45	47	45
Gender	Woman	Woman	Man	Woman	Man	Man	Man	Man
Duty	Principal	Principal	Principal	Principal	Ast.Principal	Principal	Principal	Ast.Principal
Seniority (Teacher)	15	4	6	12	8	15	26	12
Seniority (Administrator)	8	26	9	5	5	4	7	10
The Current School Seniority	3	6	4	3	1	4	7	5
The Longest Accommodation Unit as Administrator	District	City Center	City Center	City Center	District	City Center	City Center	City Center
Graduated University	Atatürk Univ.	Atatürk Univ.	Atatürk Univ.	Marmara Univ.	Kafkas Univ.	Kafkas Univ.	Gazi Univ.	Atatürk Univ.
Teacher Number	63	27	47	41	34	30	48	30
Student Number	709	397	620	504	427	450	541	470
School Type	Vocational	Vocational	Vocational	İmam Hatip	Anatolian İHL	Vocational Anatolian	Vocational	Anatolian
Is the place where you serve is your homeland?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

When Table 1 is examined, the ages of high school managers participating in the research was between 32 and 54, two of them were female and six of them were male. From 8 different school 6 principals and 2 assistant principals participated in the study. The seniority of the participants was between 4 and 26 years, their professional seniority in administration was 5 and 26 years, their seniority in the school they currently work for changes between 1 and 7 years, the location unit in which they have worked for the longest period is usually the city center. The participants graduated from following universities: Half of them from Ataturk, two of them from Kafkas, one of them from Marmara and another one graduated from Gazi. The number of teachers in the schools where the administrators work, change between 27 and 63 and the number of the students change between 397 and 709. The school types the participants work for are; vocational high schools (one Anatolian Vocational and Vocational School for Girls, three Vocational and Technical Anatolian), Anatolian High School and Imam Hatip High School (Anatolian IHHS, IHHS for Girls).

2.3. Data Collection Tool and Collecting Data

The data in the study was acquired by focus group technique as one of the qualitative research methods. The research had taken place in April 2018. After having the legal permission to interview the participants from Provincial Directorate of National Education, a week before the interview the participants had been contacted by phone to be informed about the subject. The participants were invited to the meeting hall in the faculty for the interview. The participants and researcher sat around oval table and each of them wore an ID badge with a participant number. In addition, three researchers took place in the meeting and one of them, an experienced person in focus group interviews, acted as a moderator. The participants received no intervention and interaction and the participants were encouraged during the interview. The meeting, in which the moderator asked questions one by one to all the participants as guided by interview instruction, was recorded by a camera with the permission of the participants obtained earlier. At the end of the two-hour interview, video and audible data were carefully analyzed and transcribed into writing and all the focus group interviews were evaluated by researchers and data findings were acquired. As a data collecting tool, a semi-constructed interview form and personal information form to collect personal information were developed, aiming to explore the opinions of high school administrators about innovation concept and process, the innovation competencies and practices of schools, the problems in implementations and experiences. Semi-structured interview form was prepared as a draft form and handed to experts in the educational sciences field for taking their opinions about the questions in order to carry out the focus group interview. Experts were asked to assess whether questions are serving the purpose of the research or not. The necessary adding, exporting and adjustments were made according to the opinions of the experts. The draft was applied to three administrators, and then recordings were evaluated, the final form of the interview was shaped at the end. In the semi-structured interview form prepared, there were 12 questions to identify the opinions of the teachers about the innovation and there were also 7 questions to identify personal information. Some of the questions in the interview were "There is a new concept called innovation that you hear in economics, politics and education, what do you think innovation means?" What are your innovation competencies as a school administrator and your school's innovation competencies? What do you do in your school in terms of innovation? Can you give examples", "Do you often see obstacles in your innovative works?

2.4. Data analysis

Research data was analyzed by the descriptive content analysis which is a qualitative data analysis technique as indicated in Johnson and Christensen (2014, 387). Descriptive content analysis technique was used because it focuses on providing descriptions about the experience structures and meanings of the participants. This descriptive content analysis as Creswell (2014, p.196) stated is a phenomenological research used to develop what self-description implies and analysis of meaningful patterns and expressions. For this purpose, the interview data was transcribed first and the codes were formed on the transcribed text. After that, the codes relevant to each other and creating a meaningful whole were put together under the themes and coherent. In order to secure the reliability of the coding and theme forming process, the data was coded by two researchers independent from each other, therefore, the consistency of the coders was controlled.

The main themes in the research that are based on descriptions of the experiences of the participants are as follow: "Innovation: A new mystery for administrators", "Is it me who is innovative or my school?" "Innovation Processes", "The road to innovation is closed". All the data were read and examined separately by the researchers to understand what the common ideas of the participants to create these themes are. The meaning of the responses that participants gave were shortened with codes. Themes were created according to these codes, and then determined codes and themes of the two different researchers were compared according to consistency. The themes the researchers identified were presented to the academics in Kafkas University who specialized in qualitative research in order to get expert opinions. The experts were asked to evaluate the codes in terms of identified themes and state their opinions. Both experts stated that the identified codes were "consistent" with the themes.

In the current study, in order to increase the validity of the findings, first of all, the data collection process was described clearly and every explanation by administrators were recorded. Additionally, attention was paid to the objective representation of the themes and to the themes in the codes, and also how the themes were created and how the conceptual structure was utilized were defined in detail so that the other researchers can confirm the results of this study, too. Furthermore, inter-coder reliability of the two researchers were also measured separately to increase the reliability of the research results. Moreover, the reliability of the results were ensured by assessing the consistency of results of the literature and content analysis. In this context, for each question in the questionnaire of the "Focus Group Interview of High School Administrators about the Innovation "agreement" and "disagreement" of the coders with each other were examined. As Miles and Huberman (2015, 64) stated, the reliability of the qualitative studies were determined according to dividing agreement number in coding of two researchers to total agreement and disagreement number. After that percentage calculation has been made." The reliability for this section was calculated as $12/15 \times 100 = \%80$.

3. RESULTS

The results of this research were reached through the analysis of the data. The results were presented according to the sub themes which are formed after codes and themes which are formed after sub-themes. The main themes of the research are: "Innovation: A new mystery for administrators", "Is it me who is innovative or my school?" "Innovation Processes", "The road to innovation is closed".

3.1. Main Theme 1. Innovation: A New Mystery for the Administrators

This main theme was reached after determining the school administrators' opinions on innovation concepts and processes. When the school administrators' opinions on innovation concept were examined, it was seen that they have a hard time on describing the innovation concept, Therefore the main theme title was named as a new mystery.

3.1.1. Sub-Theme 1 Change, Transformation and Schools in Education

The question that led us to this sub-theme was "Do you think there is change and transformation in education? What do you think about it?" When the change and transformation were mentioned, the participating administrators emphasized the changes in the legal texts such as law and regulation and expressed concern over the lack of instructor opinions in the changes made. For example, K8's expression *"Well, indeed, they transform without our knowledge"* shows that the instructors are not informed about the transformation taking place and in addition, the same participant's suggested that *"Transformation must be from bottom to top. The bottom must demand so that the top would do it"* for solving the problems in education. K2 stated that the changes must be decided with the top management officials and must be done if really necessary, after seriously working on it.

3.1.2. Sub-Theme 2. Irreconcilable and Foggy Concept: Innovation

When the question of *"So, there has been a concept you hear a lot recently. From economy to politics. Innovation concept. What do you think innovation is?"* was asked. School administrators generally had difficulty defining the innovation. The participants tried to define it with terms like innovativeness, adaptation and changes and it was understood from these terms that there was no agreement about the definitions. K2, who saw innovation as newness, said *"[...] introducing different ideas in all areas and materializing them in life, making the life easier, generating new ideas to make life easier, like introducing implementation...making something that already exists more useful, practical"*. K3, who said innovation was adaptation, added that *"...In a way it is*

adaptation to developments" while K6, who perceived innovation as change, used change and innovation interchangeably said "I think every change is innovation. If something existent is changing, it is because of the requirement. So, there is a consequence for that. With or without awareness an innovation movement is taking place." K4 attempted to define innovation in the most correct way possible and said "I listened in a conference. There is this thing in innovation. We change the form of something with the aim to utilize it for a convenient use. Building something on it ..." At this point of research, the participants generally try to define the innovation as much as they know. However, it is understood from the unproductive sentences in the definitions that it is a concept they don't think much about.

3.2. Main Theme 2. Is it me who is innovative or my school?

The opinions of school administrators on innovation with regards to their own competencies and competencies of their schools were considered to reach this theme. The school administrators made number of evaluations on innovation about the schools, teachers, students, parents and ministry under this main theme. These evaluations indicated that innovation is a phenomenon, which should occur with the cooperation of all education components.

3.2.1. Sub-Theme 1. Innovation that differs from school to school, student to student, teacher to teacher

It is understood from the statements of participants that they don't think the education system, schools and students are fit for the innovation. Some participants assessed that there would be differences depending on the high school types and also questioned whether the teachers and students are fit for the innovation.

School Type. The participants, who said there could be differences according to high schools, mentioned the different academic success rates of students who attended vocational high schools, science high schools (the schools which mainly focuses on science courses and picks the top percentage of the students who have high scores in graduation exams) and Anatolian high schools and the difficulty of carrying out innovation works with students enrolled in schools with low scores. For example, K1 said *"As Mr./Ms K6 said we are unable to progress with the student coming here. The child can't comprehend the reason she/he is here. For 4 years we are dealing with stuff like; don't use the phone like this, come [to school] like this or that".* K2 emphasized the importance of the innovation for vocational high schools by saying *"Innovation means a lot more in vocational high schools. It needs to be worked on more. Vocational high schools aim to educate qualified work force."* However, K6 pointed out a different aspect of situation for vocational high schools *"You see, I am a vocational high school principal. My student couldn't go over a certain score barrier, came to my school. It is a compulsory choose. He either didn't want to come here, or came because his/her parents forced to do so, or couldn't get any valid scores. That child has a reluctance. He/she shuts down himself/herself to education. I see this as an issue."* (K6).

Student. Many participants stated that the students are not fit for innovation. The reason, they said, was the low enthusiasm and motivations of the students. For example, K8 said *"Finding enthusiastic students is required"* while K6 *"...the student must have a sense of responsibility, since the students who come here don't have that kind of worry and also they are teenagers, it doesn't work even if we move heaven and earth for this cause, not only with our one-sided efforts. We need something to motivate the students. We need consciousness on their side"*. K6 spoke in a manner to support K8 and said there were students to materialize innovation even if they were few and expressed it by: *"Our intention is to let the students with high academic success to come here, blend in the student with low academic success so that there would be peer counseling. [Aim is], by implementing this kind of projects, taking them to next level. But, you see, a student comes in, for example, when you give him a paper ask him/her to write a CV, he/she can't express him/herself."* (K6).

Teacher. The participants emphasized the reluctance of significant number of teachers, while talking about the innovation competencies of teachers, and said they refrained from showing the necessary work to the student. K7' views on the innovation competencies of teachers were quite striking: *"... [The occupation] shouldn't see it as a job, the teacher, he/she needs to see it as a life style. Because, our teaching is not like an ordinary civil servant job. Unfortunately, we take this job to home, too. So on. You see, he/she is going to be a teacher but doesn't have the luxury of this features, doesn't have the enthusiasm, became a teacher just for finding a job. So, this man or woman needs to think that "what if I do this to these kids, would there be a change?"*" (K7) At one point of the talk K7 commented on the teachers' situation in school *"Doesn't think about it. Why, because they think how can I finish my classes in the shortest time possible, should I drink this tea a bit more, one more smoke from cigarette. If I could stay away from class a bit longer. Am I wrong my fellows? There are my fellow teachers trying not to have classes. The reason?"* and K3, in support of K7, as well said *"The reason is the teacher who doesn't like his/her job"*.

Parent. The question of how parents' perspective on innovation was another important issue besides the school's internal elements. When we asked the question of how parents look at innovation, only one participant answered the question, while the others acted as if they didn't hear question. K3's expression was cynical: *"The parent is adapted to change. He/she is interested in the cell phone. Not interested in the child's classes. Student forgets his/her schoolbag at home but not his/her cell phone. When he/she forgets the schoolbag the parent fetches it."*

3.2.2. Sub-Theme 2. Top Management and Legislation in Innovation

The participants evaluated the view of the National Education Authority on innovation from the different perspectives. Evaluating the Ministry's implementations in terms of innovation as positively, K6 emphasized that the teachers can't keep up with the system by saying *"the Ministry doesn't want teachers who think 'I go in and out of class just like that'. It implements applications to ensure the teachers embrace the school more"*. However, K5 said that the Ministry doesn't give enough attention to their ideas and sees them as carriers. *"When we go to the Ministry and say something, they say you are the bridge between us and the teachers, take this and pass it on to them, don't argue. They didn't give us a chance to tell our opinions"*. On the other hand, K7 said, the Ministry made some changes but it didn't always work *"The Ministry created an innovation. Based on requirement. But it didn't work."* (K7).

Some of the school administrators said, they were open to innovation, some said they might be open to it according to legislation, some others stated, however, that they would enforce the legislation. K7 *"if it is not against the legislation,"*, K6 said that he/she might do it: *"we would listen, try and do it. We all have such obligation. [Innovation] We perceive it as an obligation and to make the environment we live in."*, K2 expression was to do it by using any means *"If it is something we really want to do, we will find a way to adapt it."*

3.3. Main Theme 3. Innovation Processes

The main question of what the school principals' views were on innovation in schools was helpful to reach this main theme. Although the opinions of the school administrators about the applications of innovation in school are limited, their examples and experiences makes it easier for us to understand the situation in practice. What school principals' experiences showed us that education operation during innovation and technological instruments are quite important.

3.3.1. Sub Theme 1. Innovation Examples in Schools (non)

As it was understood from the statements of school administrators, even if there was no innovation, some new changes were introduced. Among them, K6's comment on innovation implementation in schools was an example that could be an innovation practice: *"We have an effort to produce software but now that I think of it, we receive an official writing every year to produce some new thing. There is module software. There is module software to improve the curriculum every year. But we can't."* (K6). When the teacher took the students to the garden and taught the lesson there, some administrators interpreted it as innovation (K2), some others defined helping to LÖSEV and village schools as innovation (K6). Another administrator assessed taking students to the historical visits in the city and to the parent visits as innovation (K4). Same administrator explained: *"We designed an eastern style sitting corner, areas where they can sit and read book...placed cushions. Teachers can instruct the classes. This is a kind of innovation."* (K4). Another administrator (K8) defined inviting professionals such as engineers, doctors, dentists who graduated from their schools *"to meet the current students at the weekends, eating with them and going to picnic"* as innovation. As it is understood from these statements, school administrators don't have sufficient information on innovation concept, they accept every change as innovation and their examples on the subject are not exactly right.

3.3.2. Sub Theme 2. Unbreakable rote structure of education: "Unquestioned education=unquestioning student"

The school administrators saw the inability of the students of analytical, critical and versatile thinking, the characteristics of our education system that lead students to memorize all the time and the continuance of this condition in renewed curriculum, as a problem. They stated that the education system is result-oriented but it should be process-oriented. For example, an administrator mentioned the subject with these expressions: *"...student can't think analytically. The kid just sticks to mathematical operation. Can't think versatile. ... when he/she grins the jeans, he/she can't imagine the results on a shirt. That's the main problem. Our education system itself, renewed curriculum direct the students to memorizing. Right now, we are result oriented, not the process. Since we are not focused on the process, unfortunately we are experiencing difficulty in educating qualified students. Take home message is that the education and necessities of the century are not handled in a contemporary curriculum"*. (K5) Another administrator expressed the student's trouble with innovation in the following striking sentences: *"We have this student group in our school. Let's give them some different jigsaw puzzles and tell them to create something and 50 of them can't create anything. Because they don't question, they don't think."* K2, also in a manner to support this administrator, said *"There is, in fact, such problem. Our mathematics teacher said that if I say $2 \times 2 = 5$, they won't return and say it is 4"*. The same thoughts by another administrator was verbalized like this: *"Analytical thinking, critical thinking, afterwards versatile thinking, analytical thinking...It means the child can't do it. Just an example, like a remote control. sit down, sit down, get up, get up."*

3.3.3. Sub-Theme 3. Technology, hardware, equipment

When the school administrators were asked whether the equipment, technological infrastructure and hardware required for innovation were appropriate for the innovation, they stated that the technological infrastructure and hardware were generally suitable for innovation. In fact, some administrators saw it as a problem when teachers couldn't adequately use this technology. For example, K7's expression emphasized that *"As a matter of fact, the issue is not our schools' equipment. Because vocational high schools have this feature. Vocational school goes on to have collaboration with industry, our students go to the industry."* even

if there is a lack of advanced technological equipment in schools, the internships in workplaces compensate it. Another administrator "... Look, I don't know maybe there are also in high schools, for sure, in my school there are chemistry, biology, physics labs and all equipped and they have everything. I mean from the experiment sets to everything. I talk to chemistry teachers; the chemistry lab is across my room. I say, Mr./Ms, you take the students here once a month. He/she says, sir/ma'am they attack the experiment sets. They broke two of them. I say, it is ok, let them do it, we will get another one. Sir/ma'am, alright, but what if they break something like this, what would we do?". (K3) highlighted that there was equipment but neither the teacher nor the students were able to use it. Some participants tried to explain innovation by referring to the relationship between innovation and technology and emphasized the technological tools such as interactive board and tablet. For example, K4 "Student can't use it. The masses in front of us can't use it. No matter how much we use it, there is no room for the audience for example. Is tablet infrastructure ready for this? Ok, let's use overhead projector, board." On the technological infrastructure, another administrator said "Sir, they say certain things should be done but the infrastructure is not set up. The things, that are done, are useless. The resources of the country are wasted." (K2).

3.4. Main Theme 4. Doors Closed to Innovation

While creating this main theme, the opinions of school administrators on the factors that prevented innovation in schools were taken. The school administrators indicated that the obstacles in the way of innovation are: the low employment rate of the graduates, the lack of belonging of teachers to school and their reluctance to do new things, high teacher mobility rate and the lack of openness to change in education system.

3.4.1. Sub-Theme 1. Employment: Road to Innovation

By directing the question of what prevents innovation to the school administrators, the problems of innovation were attempted to be understood in-depth. The participants pointed out that not employing the students based on the fields they are needed, the low level of success of the vocational schools because of the students enrolled just for finding a job, general student failure and the curriculums out of date are most important factors preventing the innovation.

One of the administrators stated that students were not admitted to vocational high schools based on the market needs and student demands, but according to the rate determined by senior management and considered this was a planning problem: "...vocational high school rate will be 60%. Why 60%? Why not 50%, why not 70%? How did we set 60%? We did this based on the need? No, then you need to say we need this many electricians, machinists. We need this and that. The school, you will educate this many people, this many people... We added this, you will educate three times more. Then you expect employment guarantee, as my colleague said. When the child graduates, my bread is ready, why should I go somewhere else. Then, make an effort." (K7). Similarly, K2 emphasized the importance of innovation in employment by saying "the employment rate is very important". K4, on the other hand, pointed out to the necessity of employment: "Ok, sir let me ask you something: If your students are offered something like this, in technical school, if they were told your job is ready in this factory, wouldn't he/she work? For example, in Germany final year students receive a letter, they start working", K7 stated the direct relationship between employment and innovation by saying: "...I have learnt that some of the schools which admit students with highest scores are the furniture schools in Bursa. Sir, how is that possible? How can be so much difference between the two ends of Turkey? He said, there is employment guarantee sir. Best students go there. And you look at the products you make. They are really inventing. Invention. They are officially inventing. The kid knows when I graduate, I know. I will make money between around 3-4 thousand liras when I graduate. Why shouldn't he work, why shouldn't he study?" (K7).

3.4.2. Sub-Theme 2. Sense of School Belonging and Willingness

School administrators stated that it was important for teachers and students to have a sense of belonging, coupled with motivation levels and willingness for innovation. For example, K2 "to be able to do all these works together, to have a sense of belonging. To be able to do things voluntarily for the benefit of the institution", K1 "...having a sense of school belonging", K3 "The motivational factors are needed", K7 "Willingness in education is essential. It is also compatible when there is willingness such willingness, he/she really listens your suggestion" tried to explain with these statements.

3.4.3. Sub Theme 3. Teacher mobility

As the province the research was conducted was one of the places where teacher mobility is experienced often, the school administrators were quite uncomfortable because of this state. They confirmed this situation in innovation, too. In fact, this can be seen as an important obstacle to the development of corporation culture essential for the innovation. For example, K3 emphasized the relationship between teacher mobility and innovation "...smart board! Will the team running the smart board be there next year? The schools are also the same. The man is coming, having spouse-related assignment I taught him everything from record keeping to annual plans. In June he came over, I am engaged, leaving". K2 supports this with following statements: "If there wasn't circulation in the institution. We have a meeting at the beginning of the year. We all need teachers. We change teachers all the time. The teacher gets reassignment and leaves without getting to know the student. A new teacher comes next year. For example, I took a class four years as a teacher. I knew what I taught to that child, I knew exactly what he was missing. I knew very well who was reading and how, and I could assess that. If the teacher staff is solid and there is no circulation, if there is something

to keep the teacher here and if there is corporate culture..." (K2). K3 confirmed K2's emphasis "our human resources are changing very fast".

3.4.4. Sub Theme 4. Education System's Openness to Change

While referring to the barriers of innovation, the school administrators generally stated that the openness of education system to change wasn't enough and they made some suggestions. For example, while K3 said *"The education needs to be open to change but not in my opinion. When we say open, a common denominator is found by having the education stakeholders' opinions. It seems to be changing but it does not."* K5 also expressed a similar view in his statements: *"Education needs to be concern of whole society and it should address the whole society. It is not open to change."* K7 believes in the openness of the system to change partially and explains his view with following expressions: *"There is an open section. There is part we think it is. Our opinions are asked. We think but it doesn't seem very clear. There is a problem with change."*

4. DISCUSSION, CONCLUSION AND SUGGESTIONS

In the study, it was found that some school administrators emphasized the amendments made in the legal texts such as law and regulation when change and transformation were mentioned and they were disturbed that the educators' opinions weren't given enough consideration in the amendments. The school administrators had difficulty defining the innovation concept and they referred to it as "newness", "adaptation" and "change" and there was consensus in these definitions. While some participants tried to explain the innovation by emphasizing the relationship between innovation and technology and technological tools such as interactive board and tablet. No matter how much the school administrators tried to define the innovation, it is understood from the unproductive sentences in the definitions, they don't think much about it as a concept. It has been observed that the school administrators had insufficient knowledge about innovation concept and they saw every change as an innovation and also, the examples they provided weren't suitable. As compatible with the results of this study, the study by Kurtuluş (2012), which questions the views and competencies of the teachers and students on the innovation, determined that the teachers and students don't have a good grasp of innovation and also they don't believe in innovation. Again the same study found that the opportunities should be provided to implement innovation in the schools and classrooms and it needs to be encouraged. Wu (2006) stated that the school's organizational innovation leads to innovation opportunities and activities according to school vision and educational objectives.

As understood from the school administrators' statements, even though there isn't innovation in their schools, some changes were made. They stated that they don't consider the education system, schools and students suitable for innovation in general and there could be differences in innovation according to high school types. The administrators mentioned the academic success differences between vocational high school and Anatolian and Academic High schools, and also referred to the difficulty of performing innovation works with students coming to their schools with low scores. Many school administrators stated that the students were not suitable for innovation and pointed out that the reason for this was the reluctance and low motivation of the students. When the administrators talked about the teachers' innovation competency, they emphasized the reluctance of significant number of teachers and said that they were abstaining from showing the necessary work to students for innovation. Some of the school administrators said top officials (ministries) were open to innovation.

The administrators believed it is a problem that the students in the education system lacked analytical, critical and versatile thinking, the current qualities of the education system constantly led them to memorize and this state of affairs were also continued in the renewed curriculums. They stated that the education system was result-oriented but it should be process-oriented, however, the equipment, technological infrastructure and hardware were suitable for the innovation. Furthermore, some administrators thought it was a problem that the teachers couldn't use this technology enough. The study by Keleşoğlu (2017) for creative thinking, designing, testing and evaluating the innovation education program for teacher education found that the education innovation design increased the level of creative thinking skills of teacher candidates, however, the data gained from both the diaries and focus group works revealed that this education design wouldn't be enough to reach the desired objectives in innovation. The current study revealed the need for reforms in all the teacher-training programs, in order to educate teacher candidates with innovative thinking. These findings overlap with the other findings of this study and give some clues for solutions. The teacher training programs for the already-trained teachers and administrators or the future training programs for the teachers who would be educating innovative students should be revised for the innovation and, innovation skills and awareness of the administrators and teachers should be increased in order to create innovation culture. For this purpose, the teachers who will educate analytical thinking, problem solving and critical thinking students in education system, should be trained. As a result of research by Gilad-Hai and Somech (2016) it was established that student achievement, social cohesion and organizational effectiveness levels in the schools where innovation was implemented were higher than the schools that didn't implement innovation, however the level of emotional conflict and tension were lower. Pihie, Asimiran and Bagheri (2014)'s study which evaluates the relationship between the innovation effectiveness and entrepreneurial leadership with 294 secondary school teachers in Malaysia, concluded that entrepreneurial leadership characteristics provided medium level of success in innovation practices and entrepreneurial leadership was quite important in the innovation process. For Yan and Chang (2005) a school innovation operation to improve education performance means, creating an organizational culture and environment for creativity development of the schools and the employees. In schools where innovation exists, the staff are

encouraged and directed to participate in the innovative activities. With information management system and operation, the schools build creativity with a systematic strategy to improve the dynamic process of sustainable works.

The lack of development of corporate culture in the schools has been seen as an obstacle by the school administrators for innovation. The school administrators stated that both the low skills of the teachers to use technology and high teacher mobility prevented the formation of innovation culture. As the place where the study was carried out is one of the places that the high teacher mobility was experienced, the school administrators said they were quite uncomfortable with this state and high teacher mobility was also an obstacle for innovation. In fact, this is an important obstacle for the corporate culture required for the innovation. Dibbon and Pollock (2007)'s study investigated the innovation processes where the innovation is applied and found that since the teachers lacked sufficient self-confidence and skills for communication and information technologies, the innovation process didn't exactly materialize in schools where innovation culture existed but it was observed that the teachers and administrators progressed their learning and teaching activities together. Kang and Park (2012)'s study, analyzing the leadership style of school administrators and its effects on school innovation, which was conducted by obtaining opinions of 981 vocational high school teachers, concluded that for school change and innovation applications to reach success, innovative school climates and leadership styles were important.

The school administrators stated that the most important factors preventing innovation were the low success levels of vocational high school as the students were not admitted according to the fields that needed them and because of the unemployment problem, and also the general student failure and out of date curriculums. The administrators said that the teachers' and students' sense of belonging and their motivation level and willingness were important for innovation. The school administrators said they could be open to innovation in line with legislation, however, some said they would enforce legislation for innovation. While the school administrators stated they were open to innovation within the framework of legal regulations and rules, in fact they implied that legal regulations and rules were an obstacle in realizing innovation. According to McCharen, Song and Martens (2011) one of the factors hindering the innovation is the restriction the pressure mechanisms for teachers such as by bureaucracy and rules. In this study, it was observed that while the formation of the organizational information is a factor supporting collaboration, providing learning culture is a factor supporting innovation. To Arpacı (2011) it may not be always possible to achieve innovation. Bureaucracy, approving authority, regulation and absence of qualified staff are the most important institutional obstacles of innovation process.

In the study, the school administrators stated that the education system's openness to change wasn't satisfactory among the innovation obstacles in general, they have made some suggestion:

(1) As a result of this research, it was seen that the school administrators have insufficient knowledge about the innovation concept and implementations, so the instructions to increase the knowledge and experiences of the school administrators about innovation concept and process should be carried out.

(2) The opinions of school administrators should be included more and they should be more involved in decisions in the innovation and transformation processes by the authorities in the Ministry of the National Education for the school transformation and change.

(3) In order to ensure innovation, the education system should focus on process-oriented studies instead of result-oriented studies. More implementations should be included to ensure students are involved analytical, critical and multidimensional thinking. Education curriculums and training processes should be prepared in a form to make the students think, question and criticize more.

(4) The entrepreneurship of the teachers, school administrators and students should be supported.

(5) In order to realize innovation in education, a separate and new legal infrastructure should be created and additional resources for innovation should be allocated. Encouragements should be introduced in the system to increase the motivation levels of the teachers, students and administrators about the innovation.

(6) Since this research is limited to the school administrators and focus group interviews, further comprehensive research involving different research patterns and all the groups related to education should be carried out.

5. REFERENCES

Akin, U. (2016). Innovation Efforts in Education and School Administration: Views of Turkish School Administrators. *Eurasian Journal of Educational Research*, 63, 243-260.

Akpan, C. (2016). Innovative practices in school administration. *International Journal of Educational Administration Planning and Research*, 6(8), 45-53.

- Arpacı, İ. (2011). Kamu kurumlarında teknolojik inovasyon ve inovasyon politikası. *Middle East Technical University Studies in Development*, 38(2), 111-123.
- Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. *Management Decision*, 47(8), 1323-1339.
- Çelik, N. (2016). Yenilikçilik konusunda yapılan doktora tezlerinin içerik analizi yöntemiyle değerlendirilmesi. *Uluslararası Ekonomi ve Yenilik Dergisi*, 2(1), 29-42.
- Chen, S. C., Hsiao, H. C., Chang, J. C., Shen, C. H., & Chou, C. M. (2010). School organizational innovative indicators for technical universities and institutes. *Contemporary Issues in Education Research (CIER)*, 3(7), 43-50.
- Chen, S. C., Hsiao, H. C., Chang, J. C., Shen, C. H., & Chou, C. M. (2010). School organizational innovative indicators for technical universities and institutes. *Contemporary Issues in Education Research (CIER)*, 3(7), 43-50.
- Creswell, J. W. (2014). Araştırma deseni: Nicel, nitel ve karma yöntem yaklaşımları (Çev. Edt. Selçuk Beşir DEMİR). Ankara: Eğiten Kitap.
- Dibbon, D. C., & Pollock, K. (2007). The nature of change and innovation in five innovative schools. *The Innovation Journal: The Public Sector Innovation Journal*, 12(1), 1-15.
- Erdemet, F. (2017). *Özel Lise Yöneticilerinin İnovasyon Sürecine İlişkin Görüşleri* (Unpublished doctoral dissertation) İstanbul Kültür University, İstanbul, Turkey.
- Gilad-Hai ve Somech (2016). The day after. *The Journal of Educational Administration*, 54(1), 25-36
- Goswami, S., & Mathew, M. (2005). Definition of innovation revisited: An empirical study on Indian information technology industry. *International Journal of Innovation Management*, 9(3), 371-383.
- Guidelines for collecting and interpreting innovation data (2005). *A joint publication of OECD and Eurostat, Organization for Economic Co-Operation and Development. Statistical Office of the European Communities.*
- Hsiao, H. C., Chen, S. C., Chang, J. C., Chou, C. M., & Shen, C. H. (2009). Factors that influence school organisational innovation in technical institutes and universities. *Practice*, 15 (17), 71-76
- Hsiao, H.C., Chang, J.C., Sung, H.Y. and Chen, S.C. (2009). A study of constructing evaluation indicators for organizational innovation in junior colleges. *Journal of Technological and Vocational Education*, 3 (1), 75-106
- http://www.tubitak.gov.tr/tubitak_content_files/BTYPD/kilavuzlar/Oslo_3_TR.pdf. Accessed: December, 2018
- <https://en.oxforddictionaries.com/word-of-the-year/word-of-the-year-2018>. Accessed: December, 2018
- <https://www.tdk.org>. Accessed: December, 2018
- Johnson, B. ve Christensen, L. (2014). Eğitim Araştırmaları: Nicel, nitel ve karma yaklaşımlar (Çev. Edt. Selçuk Beşir Demir). Ankara: Eğiten Kitap.
- Kang, K. N., & Park, H. (2012). Influence of government R&D support and inter-firm collaborations on innovation in Korean biotechnology SMEs. *Technovation*, 32(1), 68-78.
- Kasule, G. W. (2015). *Professional development on innovation competence of teaching staff in Ugandan universities* (Unpublished doctoral dissertation) Wageningen University, Wageningen, Holland.
- Keleşoğlu, S. (2017) *Öğretmen eğitiminde yaratıcı düşünme ve inovasyon eğitim programının tasarımı, denenmesi ve değerlendirilmesi* (Unpublished doctoral dissertation). Gazi University, Ankara, Turkey.
- Kılıçer, K. (2011). *Bilgisayar ve öğretim teknolojileri eğitimi öğretmen adaylarının bireysel yenilikçilik profilleri* (Unpublished doctoral dissertation). Anadolu University, Eskişehir, Turkey.
- Kurtuluş, M. F. (2012). Eğitimde inovasyon: öğretmen ve öğrencilerin inovasyona bakışı ve yeterliliğinin sorgulanması (Unpublished master's thesis) Gebze Technical University, İzmit, Turkey.

- Lee J.E. (2005). The relationship between organizational innovation and school efficiency. *Journal of Mei Ho Institute of Technology*, 24(1), 223-241.
- Looney, J. W. (2009). Assessment and Innovation in Education. OECD Education Working Papers, No. 24. OECD Publishing (NJ1).
- Lubienski, C. (2009). Do Quasi-Markets Foster Innovation in Education? A Comparative Perspective. OECD Education Working Papers, No. 25. OECD Publishing (NJ1).
- McCharen, B., Song, J., & Martens, J. (2011). School innovation: The mutual impacts of organizational learning and creativity. *Educational Management Administration & Leadership*, 39(6), 676-694.
- Miles, M. B. & Huberman, A. M. (2015). Nitel veri analizi. Ankara: Pegem Akademi.
- OECD & Eurostat (2005). Oslo Manual: Guidelines for collecting and interpreting innovation data. Retrieved from: <https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/OSLO>
- Park, J. H. (2012). The effects of principal's leadership style on support for innovation: evidence from Korean vocational high school change. *Asia Pacific Education Review*, 13(1):89-102. doi: 10.1007/s12564-011-9182-9
- Payogo, P. S., & Phumphongkhochasorn, P. (2020). The Development of the Innovative Model of School Administration in the Secondary Education Area Office 18. *Solid State Technology*, 2058-2065.
- Pihie, Z. A. L., Asuimiran, S., & Bagheri, A. (2014). Entrepreneurial leadership practices and school innovativeness. *South African Journal of Education*, 34(1).
- Rogers, E. M. (2003). *Diffusion of Innovations*. New York: The Free Press
- Ruttan, V. W. (1959). Usher and Schumpeter on invention, innovation, and technological change. *The Quarterly Journal of Economics*, 596-606.
- Sagir, M. (2017). Innovational Leadership in School Management. *Üniversitepark Bülten*, 6(1), 45.
- Serdyukov, P. (2017). Innovation in education: what works, what doesn't, and what to do about it?. *Journal of Research in Innovative Teaching & Learning*, 10(1), 4-33.
- Sweeney, J. E. (2016). *Innovation in the school context: An exploratory study*. University of Pennsylvania.
- Wu, S.C. (2006). The Research of Innovation Practice of the School Organization: An Analytical Case Study in a Junior High School (Unpublished master's thesis). Yuan Ze University, Taouyan, Taiwan.
- Yan, S.R. and Chang, M.H. (2005). The school innovation meaning and implement of management plan. *Middle School Education*, 56(3), 28-52.
- Yıldırım, A., & Şimşek, H. (2005). *Sosyal bilimlerde nitel araştırma yöntemleri*. Ankara: Seçkin Yayıncılık.
- Zafer-Gunes, D. (2016). The relationships among shared leadership, trust in school principals and innovation management in school. *The Anthropologist*, 24(1), 43-54.

Research and Publication Ethics Statement

All information in this study has been obtained and presented in accordance with academic rules and ethical concerns. The necessary ethical consent was received from Ethical Committee of Kafkas University on 12 April 2019, with the number of 28644117-905.02/01

Contribution Rates of Authors to the Article

All authors contributed equally to this study and the manuscript at all stages.

Statement of Interest

There is no conflict of interest between the authors of this article.

6. GENİŞ ÖZET

İnovasyon yeniliği ve değişimi kapsayan önemli bir kavram olarak karşımıza çıkmaktadır. Kavram günlük hayatta, iş hayatında ve eğitim hayatında gittikçe yaygın kullanılır hale gelmiştir (Kurtuluş, 2012). İngilizce sözlükte inovasyon “yeni bir yöntem, fikir, ürün olarak” tanımlanmakta (Oxford, 2018), Türkçe sözlükte ise “yenileşim” ve “değişen koşullara uyabilmek için, toplumsal, kültürel ve yönetsel ortamlarda yeni yöntemler kullanmaya başlayan kimsenin davranışı” olarak ifade edilmektedir (www.tdk.org). İnovasyon Latince “*innovatus*” sözcüğünden türetilmiştir. İnovasyon “toplumsal, kültürel ve yönetsel ortamda yeni yöntemlerin kullanılmaya başlaması” anlamına da gelmektedir. OECD ve Eurostat’ın ortaklaşa yayımladığı Oslo kılavuzunda ise (2005) inovasyon yeni ve önemli ölçüde geliştirilmiş mal, hizmet ürününün veya sürecin yeni pazarlama ve örgütsel yöntemin örgüt içi uygulamalarında, işyeri organizasyonunda veya dış ilişkilerde uygulanması” olarak tanımlanmaktadır. Bu tanımlamalarla birlikte aslında inovasyon kavramının dünyaca kabul edilmiş tek bir tanımı yoktur (Goswami ve Mathew, 2005). Araştırmacılar inovasyonu kendi alanlarına göre farklı şekillerde yorumlamışlardır. Örneğin Rogers (2003) iletişim alanında inovasyonu bir veya bir grup kişi tarafından yeni olarak algılanan düşünce, uygulama ya da hedef olarak; sosyal ağ analisti olan Plessis (2007, 21 akt. Sweeney, 2016) ise inovasyonu pazar bazlı ürün ve hizmetleri oluşturmak, iş süreçlerini artırmak ve yeni iş çıktıları üretmek için üretilen yeni bilgi ve düşünceler” olarak tanımlamıştır. Yönetim bilimci Baregheh Rowley ve Sambrook (2009) inovasyon kavramını; kendi alanlarında farklılaşmak, rekabet edebilmek ve ilerlemek için düşünceleri yeni/geliştirilmiş hizmet, süreç ve ürünlere çeviren örgütteki çok aşamalı süreç olarak ifade etmiştir. Ekonomist Schumpeter ise inovasyonu piyasanın, sektörün ya da bir örgütün daha önce bulunmayan bir ürün veya üretim yöntemini oluşturması olarak tanımlamıştır (Schumpeter, 1934, 66, akt. Ruttan, 1959).

Küresel anlamdaki değişim ve yenileşme hareketleri eğitiminde yenilenmesinin gerekliliğini göstermektedir. Bu anlamda inovasyon kavramı eğitimi daha etkili kılmaktadır. İnovasyon, bireylerin bilgi, beceri, yetenek ve yaratıcılığıyla beslenmekte ve gelişmektedir. Bu bahsedilen beceriler ise eğitimle gerçekleşen kazanımlardır (Looney, 2009). Diğer taraftan eğitim de yeni inovasyonlara ihtiyaç duymakta ve inovasyonla beraber gelişmektedir (Lubienski, 2009). Bu bağlamda eğitim ve inovasyon kavramları arasında karşılıklı bir ilişki olduğu görülmektedir.

Serdyukov'a (2017) göre, eğitimde inovasyon hiç olmadığı kadar acil hale gelmiştir. Eğitimde inovasyon özel bir öneme sahiptir çünkü eğitim sürdürülebilir bir gelecek yaratmada önemli bir rol oynamaktadır. Eğitim ve toplum alanında bilgiye sahip olmak kadar, sahip olunan bilgiyi enformasyona dönüştürmek de önemli hatta bilgiye sahip olmaktan daha önemli hale gelmiştir. İnovasyon ve inovasyon uygulamaları ilk başlarda fen bilimleri ve sağlık bilimleri alanlarında, daha sonraları sosyal bilimler ve eğitim bilimleri alanlarında çokça kullanılan ve üzerinde düşünülen kavram haline gelmiştir. Eğitim hedefleri, süreçleri ve çıktıları üzerinde adeta inovatif bir baskı oluşmuştur. Bu değişim sürecinde okullarda inovasyon hedef, süreç ve uygulamalarını kapsayan uygulamalar daha da önemli hale gelmiştir. Okullarda inovasyon iklimi ve kültürünün oluşması öğretmen ve öğrenci girişimciliklerinin desteklenmesi ve sürecin tamamında inovasyon uygulamalarının geliştirilmesi ve uygulanmasında eğitim ve okul yöneticilerinin tutum ve görüşleri önemlidir. Çünkü eğitim liderlerinin tutumları okulda vizyon ve misyon oluşturma sürecini etkilemektedir. Alanyazın incelendiğinde inovasyon konusu fen, sağlık ve sosyal bilimler alanlarında incelenen ve eğitim bilimleri alanında da ele alınmaya başlanan bir konudur. Ancak alanyazında okul yöneticilerinin inovasyon ve inovasyon uygulamalarına ilişkin bakış açılarını inceleyen çalışmaların sınırlı olduğu görülmektedir. Bu araştırma hem eğitim bilimleri alanındaki kuramsal bilgiye, hem de uygulamada eğitim ve okul yöneticilerinin inovasyon uygulamalarına katkı sunması bakımından önemli görülmektedir.

Bu araştırmanın temel amacı lise okul yöneticilerinin inovasyona ilişkin bakış açılarını belirlemek, okulların ve okul yöneticilerinin inovasyon yeterliliklerine ilişkin görüşlerini ortaya koymaktır. Bu amaca ulaşmak için şu alt sorulara cevaplar aranmıştır.

- 1) Okul yöneticilerinin inovasyon kavramına ve süreçlerine ilişkin görüşleri nelerdir?
- 2) Okul yöneticilerinin kendilerinin ve okulların inovasyon yeterliliklerine ilişkin görüşleri nelerdir?
- 3) Okul yöneticilerinin okullardaki inovasyon uygulamalarına ilişkin görüşleri nasıldır?
- 4) Okullarda inovasyonu destekleyen ve engelleyen faktörlere ilişkin okul yöneticilerinin görüşleri nelerdir?

Lise okul yöneticilerinin inovasyona ilişkin görüşlerinin derinlemesine incelenmesini amaçlayan araştırma tarama modelinde ve nitel yöntem kullanılarak gerçekleştirilmiştir. Bu çalışmada okul yöneticileri tarafından tanımlanmış inovasyon ve onunla ilgili yaşanan deneyimleri derinlemesine betimlediği için fenomenolojik/olgubilim araştırma yaklaşımını benimsenmiştir. Araştırmanın verileri yüz yüze küçük grup tekniği olan odak grup tekniğiyle elde edilmiştir. Bu çalışmada odak grup tekniğinin kullanılma amacı, inovasyonun sık kullanılan bir kavram olmasına rağmen özellikle okul yönetimi alanında kavramla ilgili araştırmaların yetersizliği ve odak grup tekniğinin özellikle başlangıç araştırmalarında kullanılması, onun bu çalışmada kullanılmasının önemli bir gereksesidir.

Araştırmaya katılan lise okul yöneticilerinin yaşları 32 ile 54 arasında olup, ikisi kadın, altısı ise erkektir. Araştırmaya 8 farklı okuldan 6 müdür, 2 müdür yardımcısı katılmıştır. Araştırmaya katılanların öğretmenlikteki mesleki kıdemleri 4 ile 26, yöneticilikteki mesleki kıdemleri ise 5 ile 26, şuan görev yaptıkları okuldaki kıdemleri ise 1 ile 7 yıl arasında değişmekte, yöneticilikte en uzun süre çalıştıkları yerleşim biriminin ise genellikle il merkezi olduğu görülmektedir. Araştırma verileri, nitel veri analizi tekniklerinden betimsel ve içerik analiz tekniği kullanılarak çözümlenmiştir. Kodlama ve tema oluşturma sürecinin

güvenirliğini sağlamak amacıyla, veriler birbirinden bağımsız olarak her iki araştırmacı tarafından kodlanması yoluna gidilmiş ve bu şekilde kodlayıcı tutarlılığına bakılmıştır.

Araştırmada alanyazından da faydalanılarak temel alınarak şu temalar ortaya çıkmıştır: “İnovasyon: Yöneticiler İçin Yeni Bir Bilinmez”, “Ben miyim inovatif, okulum mu?” “İnovasyon Süreçleri”, “İnovasyona giden yol kapalı. Bu temalar üzerine yapılan analizlerin sonucu görülmektedir ki okul yöneticilerinin değişim, dönüşüm denilince kanun, yönetmelik gibi yasal metinlerde yapılan değişikliklere vurgu yaptığı ve yapılan değişikliklerde eğitimcilerin görüşlerinin yeterince alınmamasından rahatsız oldukları saptanmıştır. Okul yöneticilerinin genel olarak inovasyon kavramını tanımlamakta zorlandıkları ve inovasyonu “yenilikçilik”, “uyum sağlama” ve “değişiklik” olarak ifade ettikleri ve bu tanımlamalarda da bir ortaklık olduğu belirlenmiştir. Okul yöneticileri genel olarak inovasyonu bildikleri ölçüde tanımlamaya çalışsalar da tanımlarındaki kısır cümlelerden hareketle inovasyonun onların üzerinde çok düşündükleri bir kavram olmadığı anlaşılmaktadır. Okul yöneticilerinin inovasyon kavramına ilişkin bilgilerinin yetersiz olduğu gibi her değişimi inovasyon olarak kabul ettikleri ve inovasyona ilişkin örneklerinin de çok uygun olmadığı görülmüştür. Bunların yanında okul müdürleri, öğretmenlerin ve öğrencilerin inovasyona istekli olmadıklarını belirtmişlerdir. Araştırmanın öneri olarak okul yöneticileri için inovasyon süreçleri konusunda bilgilerini artıracı eğitimler yapılmasının gerektiği ve inovasyonun sağlanması için eğitim sisteminde sonuç odaklı çalışmalar yerine süreç odaklı çalışmalara yönelmemesi belirtilebilir. Aynı zamanda girişimcilik becerisini ve uygulamalarını kapsayan dersler programlara yerleştirilmesi de önemli bir öneri olarak sunulmaktadır.