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Title:

Teachers' views on school principals' implementation of 21st-century skills

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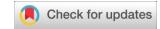
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Abstract

This study utilized a phenomenological design, a qualitative research method, to examine how school principals implement 21st century skills in schools. The participants were 16 teachers selected through criterion sampling and maximum diversity techniques. Data were gathered via face-to-face interviews using semi-structured interview guides and analyzed through descriptive analysis. Teachers reported that school principals demonstrated learning and innovation skills by showcasing innovative approaches, producing projects, problem-solving, making physical improvements, and fostering teamwork. Information, communication, and technology skills were exhibited through practices such as sharing reliable information, effectively utilizing digital platforms and technological tools, and managing the school's social media. Life and career skills were reflected in practices like making effective decisions in crises, adapting to school culture, taking initiative, and promoting transparency in school expenditures. However, despite these efforts, most teachers felt that principals' implementation of 21st-century skills was inadequate.

Introduction

The 21st century is a period marked by the rapid development of digital technologies, which have become an integral part of daily life. These technologies have permeated nearly every aspect of individuals' lives, radically transforming the social structure. The new generation, born into the digital age, grows up surrounded by these tools and views them as a natural extension of their lives. This generation shows significant differences in cognitive, social, cultural, and educational dimensions compared to previous generations, largely due to their constant exposure to digital technologies. Education is one of the areas where this change is most keenly felt. Various components such as teachers, students, school administrators, curricula, educational structures, and classroom layouts are being reshaped under the influence of digitalization. In this context, education emerges as a key force not only in transforming individuals but also in reshaping society as a whole (Kayri & Aydın, 2019).

In the 21st century, a range of political, social, economic, and technological developments have led to significant changes in the qualities expected of individuals. These changes have resulted in differences in people's knowledge and skill levels, which, in turn, have impacted education systems (Cansoy, 2018). In the information age, the rapid spread of information has fueled globalization and created the need for different cultures to coexist. Additionally, natural disasters, environmental issues, and wars have forced individuals to face changes in social, economic, and socio-cultural spheres. People are now expected to adapt to positive changes, respond appropriately to negative situations, and manage their professional, social, and personal lives with competence. In this context, individuals must not only keep pace with technological advancements but also provide meaningful responses to ongoing changes. They need to quickly sift through vast amounts of information, select and analyze the relevant data, effectively transform this information into tangible products in their daily lives. Beyond these fundamental skills, having high-level

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competencies is also essential. The competencies required of individuals in the information age are referred to as '21st century skills' (Öğretir Özçelik & Eke, 2020).

Many organizations have defined and categorized 21st century skills. One such organization, the US-based Partnership for 21st Century Skills (P21), was established through collaboration between the government, private sector, and educational institutions. The goal of this organization is to support students' success in the business world by providing a framework for 21st century learning. It organizes the knowledge, skills and competencies required by individuals into four main categories: 1) Core Subjects and 21st Century Themes, 2) Learning and Innovation Skills, 3) Information, Media, and Technology Skills, and 4) Life and Career Skills (P21, 2013).

21st-century skills are essential for thriving in today's complex world. These include learning and innovation skills like creativity, critical thinking, communication, and collaboration (P21, 2013). Information, technology, and media literacy means knowing how to find, use, and understand information effectively (Odabaş & Polat, 2008). Life and career skills help individuals adapt to change, work transparently, innovate, and take responsibility (P21, 2013). Together, these skills prepare people to be flexible, lifelong learners ready for the future.

School principals are responsible for fostering a positive environment in their schools by providing leadership and exercising authority. Additionally, ensuring the continuous development of teaching and learning processes is one of their primary responsibilities (Hallinger, 2005). As such, effective management of the educational process, promoting teachers' professional development, increasing the principals' visibility within the school, and creating a motivating atmosphere for the educational process are key tasks for principals who take on a leadership role (Horton, 2013).

School administrators can only effectively manage change in schools if they possess certain competencies and 21st century skills. However, it is believed that there are gaps in managing and implementing change within schools. Conducting a situation analysis is expected to be beneficial in addressing these issues. A review of the literature reveals that many studies explore the relationship between school principals' 21st century skills and variables such as leadership roles, communication, problem-solving, and technological skills (Balyer, 2011; Çoban, Bozkurt, & Kan, 2019; Güçlü, 2003; Dinçer, 2017; Sayracı & Gündüz, 2018). However, studies examining the 21st century skills of school administrators and how these skills are reflected in schools from the perspective of teachers are less common. Therefore, this study focuses on school principals' 21st century skills and their implementation of these skills in schools. To this end, the following questions were addressed.

What are teachers' opinions on the application of school principals' learning and innovation skills in schools?

What are teachers' opinions on the application of school principals' information, technology, and media literacy skills in schools?

What are teachers' opinions on the application of school principals' life and career skills in schools?

What are teachers' opinions on the 21st-century skills that school principals should have?

Method

The purpose of this study is to analyze how school principals implement 21st century skills based on teachers' perspectives and to evaluate the findings obtained. In this context, a qualitative research method was used. Creswell (2018) defines qualitative research as a process of exploring and understanding issues related to social life and human relationships through original methods. It offers a realistic and holistic presentation of ideas and events in their natural environments. Moreover, these studies aim to uncover the meanings of the concepts they focus on from various perspectives (Punch, 2005; Yıldırım & Şimşek, 2011). There are various designs in qualitative research, and for this study, a phenomenological design was chosen. Phenomenology, central to the qualitative research approach, is based on the idea that the phenomena under investigation can be experienced and expressed by individuals and groups (Mayring, 2000).

Participants

In this study, a participant group consisting of teachers was formed to explore school principals' implementation of 21st century skills in schools. The group was selected using purposive sampling, with criterion sampling and maximum diversity techniques applied. The research participants, who volunteered, included 16 teachers. The teachers' ages ranged from 30 to 59. Of these, 9 held a bachelor's degree and 3 had a master's degree. Their professional experience

varied from 9 to 37 years. Five participants worked in primary schools, six in middle schools, and five in high schools. To maintain confidentiality, no information that could directly identify the participants was included, and they were coded as T1 to T16. Some of their statements are included in the findings section.

Data Collection

In the data collection process, the interview technique, a qualitative research method, was employed. A semi-structured interview guide was used during the data collection phase. This technique offers a more flexible approach compared to the rigid structure of fully structured interviews, while being more systematic than unstructured interviews. It allows the researcher a certain degree of flexibility in the data collection process, while still maintaining consistency (Karasar, 1995). The collected data were analyzed using descriptive analysis. A semi-structured interview form, created by the researcher, was used to conduct the study. In developing this form, both Turkish and international literature relevant to the research purpose was thoroughly reviewed, and key topics were identified. As a result of the literature review, it was decided to examine 21st century skills under three main categories, structured into 12 items.

Data Analysis

The data analysis process began with the acquisition of the data set. In this context, the interviews, which were recorded using a voice recorder, were transferred to the computer in MP3 format. The researcher then carefully analyzed all the audio files. After accessing the audio files on the computer, the interviews were listened to in full and transcribed. Both the audio recordings and the written transcripts of each interview were electronically prepared as Word documents. To ensure participants' privacy during the analysis phase, each participant was assigned a number from 1 to 16. The collected data were grouped according to the identified themes, and a detailed analysis was conducted on these themes. The themes were determined based on the relevant literature, and the categories related to these themes were interpreted in accordance with the principles of qualitative research. The themes identified were then analyzed in depth using the descriptive analysis method.

Results

The Findings on School Principals' Implementation of Learning and Innovation Skills in Schools

Table 1 presents the findings obtained from teachers' views regarding the implementation of school principals' learning and innovation skills in schools

Table 1.
Teachers' Views on the Implementation of School Principals' Learning and Innovation Skills in Schools.

Themes	Categories	Participants	n
Creative Thinking Skills	Innovative Approaches	T4, T5, T6, T7, T8,	5
	Aesthetic Studies	T8, T11, T12, T13,	4
	Producing Projects	T5, T14, T16	3
	Creating Teaching Application Areas	T7	1
Critical Thinking Skills	Openness to Different Ideas	T5, T6, T11, T14	4
	Internal Stakeholder Satisfaction	T14, T16	2
	Empathic Approach	T4	1
Problem Solving Skills	Solving Problems	T2, T5, T6, T11, T12, T14, T16	7
	Physical Improvement Projects	T2, T6, T12	3
	CİMER Application Resolving	T7, T11	2
	Aid Campaigns	T1	1
Communication and Collaboration Skills	Sharing Ideas and Intellectual Interaction	T4, T6, T7, T11, T14	5
	Teamwork	T14, T16	2
	Social Interaction	T11	1
	Transparent Communication	T5	1

Upon examining Table 1, learning and innovation skills are categorized into four main themes: creative thinking, critical thinking, problem-solving, and communication and collaboration skills. Under the theme of creative thinking skills, the categories of 'Innovative Approaches', 'Aesthetic Studies', 'Producing Projects' and 'Creating Teaching Application Areas' emerged. Teachers frequently highlighted that school principals applied creative thinking skills by

demonstrating innovative approaches within the school. Following this, student aesthetic studies, producing projects, and creating teaching application areas were mentioned in order of significance. Some of the teachers' opinions on this matter are as follows:

T4: 'We can say that he has creative thinking skills. He reads a lot of books and follows innovative approaches, but he doesn't reflect this much in the school. He supports, but doesn't make much of an effort himself. He doesn't come up with ideas but supports those who do. '

T7: 'I would say he's a true leader. He has been at the school for two years, and he values our ideas. He has brought innovation to the school. Currently, he's offering weekend courses for students preparing for the LGS exam, and he's set up painting and IT labs. He always does his best. '

T11: 'Yes, he is a true leader. He addressed the school's health and safety deficiencies within half a term. He made improvements to the network, the ironwork, and the physical structures. There were areas where water was leaking from the roof, and he had those fixed as well.'

While some teachers believe that school principals possess creative thinking skills and demonstrate them at school, others feel that principals still maintain a traditional and autocratic leadership style. This is evident in the way principals often fail to give teachers enough opportunity to share their opinions during decision-making processes. Additionally, it is noted that school principals generally resist teachers' innovative ideas, often rejecting them. As a result, these teachers believe that school principals lack sufficient creative thinking skills. Some teachers' views on this matter are as follows:

T3: 'He tends to be a bit traditional. There's not much room for creativity. New opportunities aren't given a chance. For instance, activities that aren't part of the plan are excluded. They say permission is needed for these things, but in the end, they say no. '

T9: 'He's not very experienced—he just joined the school and hasn't adapted to the high school environment. He's not open to innovations and often resorts to threats. I work at an Imam Hatip high school, and the principal threatens teachers when students fail. '

T10: 'He does everything based on his own ideas and preferences. He acts according to the person, rejects new ideas, and discriminates between teachers. He doesn't listen to female teachers, but he shows favor to male teachers.'

Upon examining Table 1, the categories of 'Openness to Different Ideas,' 'Internal Stakeholder Satisfaction,' and 'Empathic Approach' emerged under the theme of critical thinking skills. Teachers often highlighted that school principals demonstrated critical thinking skills by being open to different ideas within the school. This was followed by practices such as conducting internal stakeholder surveys and showing an empathic approach toward school personnel, listed in order of significance. Some teachers' views on this matter are as follows:

T4: 'Our school principal possesses critical thinking skills and generally shows empathy toward us. He doesn't make enemies and doesn't let anyone become his enemy. '

T5: 'Our principal has a positive approach to critical thinking. He considers various perspectives in decision-making processes. He has created an environment at school where both teachers and students feel comfortable expressing their ideas. For example, before making a new decision, he holds a brief meeting and gives teachers the chance to share their thoughts. '

T14: 'Our principal both expresses and demonstrates through his actions that he is open to criticism and that problems can be solved through discussion. He values everyone's opinion on matters related to the school, organizes satisfaction surveys, and acts based on the majority's wishes. '

While some teachers believe that school principals demonstrate critical thinking skills, others feel that principals lack these skills. They argue that principals oppose differing opinions, often stray from objectivity, adopt a 'my way or the highway' mentality, discriminate between teachers, and focus more on the current problems within the school. Some teachers' views on this issue are as follows:

T7: 'He doesn't have critical thinking skills. He listens to us, but ultimately, the principal always has the final say. For example, we teachers didn't want to separate the successful and lower-performing classes, but he ignored our input and organized the classes by grade. He doesn't treat teachers objectively; he makes distinctions between them.'

T13: 'He doesn't have it. Leadership is important to me—it's an inherent quality—but unfortunately, our principal lacks it. He doesn't have a critical perspective. His ideas and views seem driven by his own ego. He should involve his staff in the management process, but he believes that he should make all the decisions. He's new to the school, and he has prejudices against some of us. He should take the time to get to know us before making decisions, but instead, he tends to criticize us. '

Upon examining Table 1, the categories of 'Solving Problems,' 'Physical Improvement Projects,' CİMER Application Resolving' and 'Aid Campaigns' emerged under the theme of problem-solving skills. Teachers often highlighted that school principals demonstrated their problem-solving skills by addressing various issues at school. These actions were followed, in order of significance, by physical improvement projects, CİMER application resolving and organizing aid campaigns. Some teachers' views on this matter are as follows:

T2: 'He has strong problem-solving skills. He resolves issues quickly and with alternative solutions. For example, he organized a charity bazaar to help students who were financially disadvantaged and in need of assistance.'

T16: 'Yes, I believe he is competent in this regard. Whenever a problem arises at school—whether involving students, teachers, parents, or finances—he approaches it with a solution-oriented mindset. He ensures that the problem is addressed or, at the very least, he makes a genuine effort toward finding a resolution. '

In contrast to the teachers who believe that school principals demonstrate effective problem-solving skills, some teachers expressed concerns that principals often provide superficial and temporary solutions to school-related issues. They noted that principals tend to adopt a 'I know what's best' attitude and frequently delegate problems to vice principals or other staff members instead of addressing them personally. These behaviors suggest that principals' problem-solving skills may be insufficient. Some teachers' views on this matter are as follows:

T3: 'The principal at my school believes he is solving problems, but he only proposes his own solutions, which are not always fair. For example, he tried to address issues related to students' arrival times by imposing harsh and punitive measures. I don't consider that an example of effective problem-solving.'

T10: 'He doesn't have problem-solving skills. His approach tends to be aggressive. When a problem arises, we refer it to the guidance counselor. I don't go to the principal—everyone in the school ends up handling their own problems.'

T15: 'His problem-solving abilities are weak. He struggles with analyzing a situation, making decisions, and reaching a resolution. He often shuts his office door and isolates himself from the rest of the school.'

Upon examining Table 1, the categories of 'Sharing Ideas and Intellectual Interaction,' 'Teamwork,' 'Social Interaction,' and 'Transparent Communication in Meetings' emerged under the theme of communication and collaboration skills. Teachers frequently emphasized that school principals demonstrate these skills by engaging in idea-sharing and fostering intellectual interaction with teachers. This was followed in importance by practices related to teamwork, social interaction, and maintaining open and transparent communication. Some teachers' views on this subject are as follows:

T4: 'He is open to communication and unity. He's a humanistic person and gets along well with everyone. He supports teachers, approaches them in a friendly way, and exchanges ideas with us when needed. '

T5: 'Our principal values open and transparent communication with both parents and students. He is open to dialogue and collaboration. We observe this during regular school meetings and his active participation in parent meetings. '

T14: 'Our principal shares all the necessary information in our school's WhatsApp group and takes the lead in fostering collaboration. '

While some teachers believe that school principals demonstrate effective communication and collaboration skills, others concluded that these skills are lacking. They reported that certain principals use a harsh tone in the school environment, display inconsistent behavior, discriminate among staff, threaten or belittle teachers and students, fail to listen, show prejudice, and react impulsively. These behaviors suggest a lack of effective communication and collaboration skills. Some teachers' views on this issue are as follows:

T1: 'I think he's weak in communication. Compared to my previous principals, he struggles with effective communication and has had conflicts with other teachers over it. He speaks harshly and often raises his voice when addressing teachers, parents, and students. '

T12: 'No, he doesn't demonstrate communication skills. When a teacher was reported to CİMER, he harshly and directly reprimanded them. He should have approached the issue more constructively. Although he sometimes asks for our opinions, he only acts on them if they align with his own thinking. '

Findings on the Implementation of School Principals' Information, Technology, and Media Literacy Skills in Schools Based on Teachers' Opinions

Table 2 presents the findings based on teachers' perspectives regarding the extent to which school principals apply information, technology, and media literacy skills in schools.

Table 2.
Teachers' Views on the Implementation of Information, Technology, and Media Literacy Skills by School Principals in Schools.

Themes	Categories	Participants	n
Information Literacy Skills	Acquiring and Transferring Information	T1, T2, T7, T9, T14	5
	Sharing Accurate Sources	T2, T6, T11, T13	3
	Legislation and Field Knowledge	T1, T2, T7	3
Information and Communication Technologies (ICT) Skills	Using Digital Platforms	T6, T7, T13, T14	4
	Using Technological Tools	T2, T3, T9	3
Media Literacy Skills	Using Social Media Accounts Actively	T3, T4, T5, T6, T7, T9, T12, T14	8

An analysis of Table 2 reveals that information, technology, and media literacy skills are categorized under three main themes: information literacy, information and communication technologies (ICT), and media literacy. Within the theme of information literacy, three subcategories were identified: "Acquiring and Transferring Information," "Sharing Accurate Sources," and "Legislation and Field Knowledge." Teachers frequently highlighted that school principals demonstrate information literacy skills primarily by acquiring and accurately transferring relevant information. This was followed, in terms of importance, by the ability to share reliable sources and maintain a strong understanding of legislation and professional knowledge. Some teachers' views on this topic are as follows:

T2: 'I think he has strong information literacy skills. Especially during the pandemic, he actively followed platforms like EBA. I believe he is competent in this area; he also keeps up with projects and similar initiatives. '

T13: 'Yes, we can say he has information literacy skills. He holds a PhD, is an expert in his field, and is knowledgeable about legislation. However, he lacks practical application at school. He forwards official documents to us without much filtering or clarification. '

In addition to teachers who believe that school principals demonstrate information literacy skills, there are also teachers who think otherwise. Some feel that principals do not stay up to date or effectively pass on information literacy skills to their staff, as they tend to rely on second-hand information. Here are some of the teachers' views on this issue:

T10: "Not at all. We get all the information from the vice principal. All the teachers complain about him, and no one really respects his approach. We usually learn about new developments from others or from different schools. Since he is older, he struggles to guide us toward accurate and reliable sources."

T15: "He lacks these skills. As I mentioned before, he has become quite isolated. He is not effective in problem-solving and certainly doesn't approach issues from a scientific perspective. In fact, he tends to ignore problems rather than working to resolve them—even in everyday situations."

When examining Table 2, the categories of "Using Digital Platforms" and "Using Technological Tools" emerge under the theme of Information and Communication Technologies (ICT). Teachers frequently highlighted that school principals demonstrate ICT skills primarily through the use of digital platforms within schools. This was followed by the application of technological devices. Some teachers' views on this matter are as follows:

T7: "Yes, I can say that he possesses ICT skills. He analyzes the results and questions from trial exams, generates the results in a digital environment, distributes them to students, and prepares a booklet based on this. He does this in collaboration with other teachers and the IT specialist."

T14: "Yes, I believe he has ICT skills. Our principal guides us as teachers in fostering individuals who are equipped for the needs of the digital age. Additionally, the use of computers and the internet, the installation of smart boards, and the encouragement for teachers to utilize them all demonstrate that he possesses these skills."

While some teachers believe that school principals demonstrate their ICT skills at school, others feel that these skills are insufficient. They argue that principals often delegate tasks involving information and technology to others, particularly IT teachers. Some teachers' opinions on this matter are as follows:

T8: "I don't think he has ICT skills. He's not very good with technology, and I would say he's inadequate in this area. He usually has the assistant principals handle the school's technology-related tasks."

T12: "He doesn't have ICT skills. Honestly, I've never seen him engage with technology at school. The assistant principal usually handles any technological issues I encounter."

When examining Table 2, the category "Using Social Media Accounts Actively " appears under the theme of media literacy skills. Teachers frequently noted that school principals demonstrate media literacy skills by actively using and following the school's social media accounts. Some teachers' views on this subject are as follows:

T3: "I would say he has some media literacy skills, but they're not very sufficient. The reason for this is that he's not very open to innovations and tends to be more traditional. His age and imminent retirement also seem to influence this."

T5: "I think he has some media literacy skills, but he needs to take a more systematic approach. He should apply his existing skills to education by creating media content for the school, which could help inform and educate students. It's clear that our principal isn't fully utilizing his media skills. Technology integration shouldn't be limited to just using, following, or sharing digital documents on the school's social media accounts."

While some teachers believe that school principals demonstrate media literacy skills, others argue that principals lack these skills, as they delegate tasks requiring media literacy to others at school. Some teachers' views on this issue are as follows:

T2: "I don't think he has media literacy skills. He passes on information to us without verifying it. To be honest, he's not very knowledgeable in this area. He tends to follow the media only during political periods and often aligns with the political views of teachers. He believes there's too much detail in the media. He knows just enough to get by, but doesn't use it in official or school-related matters. He hasn't developed in this area because the assistant principals are more knowledgeable and take charge of the programs he should be using."

T10: "He doesn't have this skill. Media-related developments at school are handled by the IT teacher and the science teacher. He assigned them to these tasks. He worked in a village for 20 years, and this is his first time working in a central position, so he has some gaps in this area."

Findings on the Application of Life and Career Skills of School Principals in Schools According to Teacher Opinions

The findings obtained from teacher opinions regarding the application of life and career skills of school principals in schools are presented in Table 3. When examining Table 3, life and career skills are categorized under five themes: flexibility and adaptation, initiative and self-management, social and intercultural skills, productivity and accountability, and leadership and responsibility. Under the theme of flexibility and adaptation, the categories "Making Quick Decisions in Crisis Situations," "Adapting to School Culture," and "Organizing Aid Activities" were identified. Teachers often highlighted that school principals demonstrate flexibility and adaptation skills by making quick decisions and implementing them during crisis situations, particularly during pandemics and natural disasters. Following this, practices such as adapting to the school culture and organizing aid activities during natural disasters were also frequently mentioned, in order of importance. Some teachers' views on this matter are as follows:

T6: "He has flexibility and adaptation skills. Last year, a large cafeteria had to be opened in the school district. He managed to get everything done in a very short time and opened the cafeteria. When there was an earthquake, he immediately set up a mobile soup kitchen and took charge of the situation."

T7: "He has flexibility and adaptation skills, and he's good at it. He makes quick decisions in times of crisis and follows through with them. We didn't have an IT classroom in our school, but the principal used all available resources to create one from scratch. He even built a very nice classroom with his own hands."

Table 3.
Teachers' Views on the Implementation of Information, Technology, and Media Literacy Skills by School Principals in Schools

Themes	Categories	Participants	n
Flexibility and Adaptability	Making Quick Decisions in Crisis Situations	T6, T7, T11, T14	4
	Adapting to School Culture	T4, T11,	2
	Organizing Aid Activities	T6, T16	2
Taking Initiative and Self-Management	Taking Responsibility for Decisions Made	T1, T12	2
	Taking Initiative in Activities	T1, T16	2
Social and Intercultural Skills	Respect and Tolerance for Differences	T2, T5, T6, T7, T11, T16	6
	Participation in Social and Cultural Activities	T4, T6, T11, T16	4
	Cooperation Activities	T4, T12, T14	3
Productivity and Accountability Skills	Using Time Effectively	T3, T5, T6, T11	4
	Working Efficiently	T7, T11, T14,	3
	Informing About Expenses	T1, T2, T16	3
	School-Parent Association Meetings	T7, T11, T16	3
	School Renovation Procedures	T1, T6	2
Leadership and Responsibility Skills	Creating Authority	T11, T14	2
	Establishing Effective Communication	T11, T16	2

While some teachers believe that school principals demonstrate flexibility and adaptability, others feel that principals lack sufficient skills in these areas. These teachers argue that principals struggle to adapt to changing conditions, new practices, and often maintain traditional approaches. They also mention inexperience and inadequacy in crisis management as key factors. Some teachers' opinions on these issues are as follows:

T5: "I believe our principal has shortcomings when it comes to flexibility and adaptability. There are delays in adapting to changing conditions and new practices. He doesn't always come up with flexible solutions to meet the needs of teachers and students."

T8: "He doesn't have these skills. He struggles to keep up. While he tries to adapt, I wouldn't say he's open to rapidly changing conditions or learning new skills, especially since he's nearing retirement age."

When examining Table 3, the categories "Taking Responsibility for Decisions Made" and "Taking Initiative in Activities" are highlighted under the theme of taking initiative and self-management skills. Teachers often pointed out that school principals demonstrate initiative and self-management by taking responsibility for their decisions at school. This was followed by taking initiative in social and cultural activities. Some teachers' opinions on this matter are as follows:

T1: "I can say that he has the ability to take initiative and self-manage. He takes responsibility for the decisions he makes, manages himself well, and sometimes goes beyond his routine. He can take initiative in social and cultural activities."

T16: "I think my principal is average when it comes to taking initiative. Due to his overprotective nature, he sometimes prefers to play it safe rather than taking initiative. But he always stands by the decisions he makes."

In contrast, some teachers feel that school principals lack initiative and self-management skills. They argue that principals are stuck in routine and legislative frameworks, avoiding risks out of fear of punishment in situations where risk-taking is needed. Some teachers' views on this are as follows:

T9: "He doesn't have initiative or self-management skills. For example, when there was a complaint about one of our teachers to CİMER, he didn't stand by the teacher after they received a low grade. He didn't take the initiative."

T15: "His initiative and self-management skills are very weak. He's afraid of management, his planning is weak, and teamwork is lacking. He doesn't contribute to the school's reputation or understand how to manage the work system. There are no solutions to problems, and I think his self-management skills are also lacking."

When examining Table 3, the categories of "Respect and Tolerance for Differences," "Participation in Social and Cultural Activities," and "Cooperation Activities" are highlighted under the theme of social and intercultural skills. Teachers frequently emphasized that school principals demonstrate social and intercultural skills by showing respect

for and tolerance towards differences within the school. This was followed by participation in social and cultural activities and cooperation, listed in order of importance. Some teachers' views on this matter are as follows:

T2: "Our principal has strong social and intercultural skills. He is very respectful of differences, whether it's regarding different sects or people. He doesn't pry into people's differences. He excels in the social sphere, organizes social activities, and provides both material and moral support for such events."

T5: "He has social and intercultural skills. He is a leader who communicates well with students from different cultural backgrounds."

On the other hand, some teachers believe their principals lack social and intercultural skills, citing reasons such as not participating in social and cultural activities or showing favoritism among teachers. Some teachers' opinions on this issue are as follows:

T9: "He doesn't have social and intercultural skills. He's not tolerant and discriminates among teachers. He arranges the lesson schedules for those he's close to, clears Mondays and Fridays for them, and spreads the schedules of those he's not on good terms with throughout the week."

T10: "He doesn't have this skill at all. For example, he called me a 'dirty communist' because I'm from the Eğitim-İş union. He shouts at teachers, and when some teachers are harsh with him, he becomes timid and cowardly towards them."

When examining Table 3, the categories of "Using Time Effectively," "Working Efficiently," "Informing About Expenses," "Teacher-Parent Association Meetings," and "School Renovation Procedures" are highlighted under the theme of productivity and accountability skills. Teachers often noted that school principals demonstrate productivity and accountability by using time effectively within the school. This was followed by practices such as working efficiently, keeping stakeholders informed about expenses, organizing parent-teacher association meetings, and overseeing school renovation procedures, in that order of importance. Some teachers' views on this topic are as follows:

T6: "Yes, he has productivity and accountability skills. He uses his time effectively, especially during the parent-teacher association meetings. In terms of course programs or at school, he holds meetings with administrators every Monday, inspects the cafeterias, and ensures all procedures at the school are handled by the end of the day."

T11: "Yes, he has productivity and accountability skills. For example, they completely renovated the school, made necessary corrections, and there is accountability. He informs teachers about everything."

However, some teachers believe their principals lack productivity and accountability skills. They argue that principals do not follow the school's working hours and often delegate their responsibilities to others. Some teachers' opinions on this matter are as follows:

T4: "Of course, he doesn't have productivity and accountability skills. He doesn't put in enough effort. His ideal scenario is that he doesn't get involved with the 'meat and milk' of the work, leaving the vice principals and teachers to handle everything."

T9: "No, he doesn't have this skill. He doesn't spend much time at school. For instance, I started an English course, and while he focused on working hours, I had to close the course down. He lacks accountability too. His office is usually locked, and he's not often present at school."

T13: "No, he does not have productivity and accountability skills. He created our lesson plans in a very illogical way, distributing them across different days. When we asked him why he did that, he simply said it was what he found appropriate. He claims he will disrupt the system at this school, which means he is definitely not productive or accountable."

When examining Table 3, the categories of "Creating Authority" and "Establishing Effective Communication" fall under the theme of leadership and responsibility skills. Teachers often highlighted that school principals demonstrate leadership and responsibility by establishing authority over both teachers and students. This was followed by practices such as establishing effective communication with teachers and students. Some teachers' views on this topic are as follows:

T14: "Yes, he has these skills. He can establish positive relationships while doing his job. He adapts his leadership style to the situation and is able to motivate and organize teachers and students in a positive way."

T16: "I believe my principal has a very strong sense of leadership and responsibility. He handles issues that many principals avoid and focuses on solving any problems that arise. He establishes authority over both teachers and students."

However, some teachers feel that their principal's leadership and responsibility skills are insufficient. They believe the principal delegates responsibilities to others, with vice principals taking on leadership roles instead. Other reasons cited include disciplinary problems at school, a lack of engagement with school issues, and not having a meaningful voice in school matters. Some teachers' opinions on these issues are as follows:

T10: "He doesn't have leadership and responsibility skills. He avoids any trouble. For example, when a student got his finger stuck in the door, the principal got angry at the child and told the teacher not to send him any more students."

T13: "No, he doesn't have these skills. He lacks leadership skills. When you're new, you need to get to know the environment, understand the teachers, and include their feelings and thoughts. But he didn't do that—he approached us with prejudices."

The Findings on School Principals' Implementation of Learning and Innovation Skills in Schools

Table 1 presents the findings obtained from teachers' views regarding the implementation of school principals' learning and innovation skills in schools

Table 4.
Teachers' Views on the Implementation of School Principals' Learning and Innovation Skills in Schools.

Theme	Categories	Participants	n
Management Skills That School Principals Should Have	Communication	T2, T4, T5, T8, T10, T11, T14, T15, T16	9
	Collaboration and Teamwork	T1, T5, T7, T9, T10, T14, T16	7
	Equality and Justice	T1, T10, T11, T12, T16	5
	Empathy	T1, T6, T9, T13	4
	Leadership	T1, T5, T13, T15	4
	Technology Literacy	T4, T5, T6, T8	4
	Problem Solving	T4, T11, T14, T15	4
	Foresight and Decision Making	T4, T13, T15	3
	Legislative Knowledge	T2, T6	2
	Responsibility	T2	2
	Time Management	T14, T15	1
	Planning	T14	1
	Field Knowledge	T2	1
	Assertiveness	T11	1

When examining Table 4, several key management skills that school principals should possess in the 21st century emerge, including "Communication," "Collaboration and Teamwork," "Equality and Justice," "Empathy," "Leadership," "Technology Literacy," "Problem Solving," "Foresight and Decision Making," "Legislative Knowledge," "Responsibility," "Time Management," "Planning," "Field Knowledge," and "Assertiveness." Teachers consistently highlighted that communication, collaboration, and teamwork are essential management skills for school principals, followed by equality and justice, empathy, leadership, technology literacy, problem-solving, foresight, legislative knowledge, responsibility, time management, planning, field knowledge, and assertiveness skills, in that order of importance.

Most teachers emphasized that the two most critical management skills for school principals in the 21st century are "Communication" and "Collaboration and Teamwork." Some teachers shared their thoughts on this issue as follows:

T4: "Principals should be selected based on current technology literacy, strong foresight, and problem-solving abilities within their field. They should receive in-service training, be sent abroad for personal development, and create the necessary infrastructure here. However, they often have limited authority and responsibility."

T10: "Empathy, social skills, and a strong ability to communicate and understand people are essential. They must be fair and not act based on personal preferences. Dialogue and approach are key, and principals should be impartial, a person who is both liked and respected. Selection should not be based solely on exams. There could be academies to train leaders, just as teachers are trained."

T14: "Principals should have communication, decision-making, planning, problem-solving, motivation, teamwork, and time management skills. These skills can be developed initially through formal education and then practically applied."

T16: "Principals must possess cooperation, communication, critical thinking, and creative thinking skills. These are essential for effective school management, as they contribute to a more positive and harmonious work environment. Trainings and seminars could be organized to develop these skills."

Findings on What Should Be Done to Enhance the Management Skills School Principals Should Possess in the 21st Century According to Teachers' Opinions.

Table 5 presents the findings from teachers' opinions on what should be done to enhance the management skills that school principals should possess in the 21st century**.**

Table 5.
Teachers' Opinions on Practices to Increase the Implementation of Management Skills That School Principals Should Possess in the 21st Century

Theme	Categories	Participants	n
How Should the Management Skills of School Principals Be Increased?	Practical In-Service Training and Seminars	T4, T5, T6, T9, T12, T14, T16	7
	Interview based on fair and merit selection criteria	T1, T2, T4, T7, T10, T12, T15	7
	Increasing leadership and management courses in education faculties	T8, T10, T12, T13	4
	Reducing bureaucratic pressure and increasing authority	T4, T5, T13	3
	Applying Psychological Tests	T2, T15	2
	Conducting Process Control and Satisfaction Surveys	T13	1

When examining Table 5, under the theme "How Should the Management Skills that School Principals Should Have Be Increased?", the categories identified include "Practical In-Service Training and Seminars", "Interviews Based on Fair and Merit-Based Selection Criteria", "Increasing Leadership and Management Courses in Education Faculties", "Reducing Bureaucratic Pressure and Increasing Authority", "Applying Psychological Tests", and "Conducting Process Control and Satisfaction Surveys." Teachers frequently emphasized that in order to enhance the management skills required for school principals in the 21st century, providing practical in-service training and seminars, along with conducting interviews based on fair and merit-based selection criteria for school principals, are essential. Following this, increasing leadership and management courses in education faculties, reducing bureaucratic pressure, and increasing principals' authority were also highlighted. Additionally, applying psychological tests and conducting process control and satisfaction surveys were mentioned as important practices.

The majority of teachers stated that to increase the management skills of school principals, it is crucial to offer practical in-service training, seminars, and interviews based on merit during the selection process for school principals. Some of the teachers' views on this matter are as follows:

T1: "Leadership is essential. All teachers are willing to make extra sacrifices for a fair and effective leader. Equal and fair treatment, a balanced distribution of tasks, and support for teachers during difficult times are necessary. When selecting principals, these skills should be prioritized, and the selection criteria should reflect this."

T4: "Principals should receive in-service training and seminars, along with consultations from personal development experts. Additionally, ministers should be sent abroad—not as tourists, but with the goal of bringing back infrastructure ideas they can implement here. School principals hold many responsibilities but have limited authority, so their authority should be increased."

T7: "The merit system is very important. Principals should be selected based on competence—individuals with experience who have developed themselves. The selection process should be strictly merit-based."

T10: "Selection should be based on merit, with no favoritism. The chosen individual should be someone who is loved and respected by their community, selected solely through an exam process. Additionally, establishing academies where leaders are trained, just as teachers are, could be a good step."

T12: "Instead of superficial exams, serious training should be offered to develop qualified managers. Merit-based exams, along with training in interviews, public speaking, and empathy, should be implemented. Applied exams should be frequently updated, as managers cannot be chosen solely based on personal connections."

Discussion, Conclusion & Suggestions

Teachers indicated that school principals demonstrate their learning and innovation skills through various practices, including the implementation of innovative approaches, the initiation of projects, the creation of teaching practice areas, problem-solving, physical improvement efforts, aid campaigns, teamwork, fostering social interactions, and maintaining open and transparent communication during meetings. According to Yıldırım (2011), the ability of school principals to solve problems, improve the physical conditions of schools, and focus on addressing student issues are critical indicators of their managerial effectiveness. A study by Turan, Aydoğdu, and Yıldırım (2012) also highlighted that school principals feel a strong sense of responsibility for improving the physical infrastructure of schools and ensuring school security, actively engaging in related initiatives. Furthermore, research by Uluğ (2015) and Karakütük, Özbal, and Sağlam (2017) emphasizes the important roles school principals play in ensuring school security, fostering a healthy educational environment, and organizing social and cultural activities within the school.

Teachers also noted that school principals' information, communication, and technology (ICT) skills are demonstrated through practices such as leveraging social media knowledge, sharing reliable resources, staying updated on relevant legislation and field-specific knowledge, and utilizing digital platforms and technological tools. Additionally, school principals exhibit their life and career skills by making swift decisions in crisis situations, adapting to the school culture, taking responsibility for their decisions, showing initiative, and respecting and tolerating differences. These skills are further reflected in their participation in social and cultural activities, their efforts to promote cooperation within the school, their effective use of time, work efficiency, and their transparency in sharing information about financial expenditures.

The findings of Elekoğlu and Demirdağ (2020) demonstrate that teachers evaluate school principals on multiple dimensions in relation to 21st-century skills. Moreover, Helvacı (2010) observed that many school administrators are increasingly engaging with contemporary 21st-century topics, such as participation in TEKNOFEST competitions, robotic coding training, digital literacy programs, and artificial intelligence studies within their schools. These principals not only embrace such initiatives but also actively encourage their teachers to engage in these advancements, thus contributing to a culture of innovation and continuous professional development within their institutions.

In our research, based on the opinions gathered from teachers, it was concluded that the application of school principals' creative thinking, critical thinking and problem-solving, communication, and collaboration skills in schools is inadequate. The findings indicate that the application of learning and innovation skills by school principals needs significant improvement. According to Baloğlu (2011), school principals must be individuals who are open to decision-making, problem-solving, and diverse ideas, while also being well-trained in areas such as human relations, communication, and information technologies. However, teachers reported that many school principals continue to rely on traditional practices, reject innovative ideas, and remain resistant to change, often attributing this behavior to their impending retirement. This reluctance to embrace new approaches has contributed to the perception that principals' creative thinking skills are insufficient.

Moreover, teachers noted that principals tend to be closed off to differing opinions, often adopting a "my way or the highway" approach rather than fostering open dialogue. This attitude has led to the conclusion that their critical thinking skills are also lacking. Teachers highlighted that principals frequently engage in discriminatory practices among staff and focus excessively on the negative aspects of school life, rather than considering a balanced or objective perspective. This further reinforces the perception that the principals' ability to think critically and objectively is underdeveloped, ultimately hindering the growth of a collaborative and forward-thinking school environment.

It is widely recognized that some school principals avoid addressing issues within the school, show little regard for teachers' ideas, and fail to prioritize their needs and expectations. This general sentiment, shared by many teachers, stems from the observed behavior of school principals in the educational environment (Ünal, 2000). Regarding the application of information and communication technologies (ICT) and media literacy skills, teachers' opinions suggest that school principals generally lack these competencies, and their practical application within schools is insufficient. The findings indicate a pressing need to enhance school principals' abilities in the areas of information, technology, and media literacy. As emphasized by Yalçın (2018), it is essential for educators to effectively utilize information, media, and technology in order to equip themselves as competent citizens in the 21st century. Therefore, improving these skills among school principals is critical for fostering a modern and technologically adept learning environment.

Teachers expressed concerns that school principals often fail to stay updated with current information at school, instead spreading rumors from others, which indicates a lack of sufficient information literacy skills. Furthermore, teachers noted that principals tend to delegate tasks that require information and communication technologies (ICT) and media literacy skills to others, particularly seeking assistance from IT teachers for technology-related tasks. This highlights the inadequacy of these skills among school principals. These findings align with existing literature on information, technology, and media literacy, as similar conclusions have been drawn in various studies (Aydın, 2016; Demirtaş & Özer, 2014). From these observations, it is evident that school principals are struggling to effectively fulfill their role in advancing and developing schools in accordance with institutional goals. As Yalçın (2018) points out, educators must use information, media, and technology effectively to lead schools forward and prepare themselves as 21st-century citizens. Baloğlu (2011) emphasizes that school administrators should possess expertise in areas like human relations and communication. In the 21st century, school principals are expected to respond meaningfully and effectively to ongoing changes, adapt to technological advancements, and select reliable information from the vast amounts available. Additionally, they must transform this knowledge into practical applications both in daily life and within the school context. Beyond these foundational skills, school leaders must also exhibit high-level cognitive abilities and strong managerial competencies (Öğretir Özçelik & Eke, 2020).

The findings show that school principals' life and career skills are insufficient and need improvement. Teachers highlighted that principals struggle to adapt to changing conditions and resist new practices, relying on traditional approaches. Inexperienced principals also fail to manage crises, neglect routine tasks, and avoid taking initiative, leading to weak leadership and responsibility skills.Principals were found to lack strong social and cultural skills, often avoiding interactions with teachers and exhibiting discriminatory behaviors, which negatively impacts school dynamics. Teachers also noted principals' failure to adhere to working hours and delegate duties, diminishing productivity and accountability. Additionally, principals often delegate leadership roles to vice principals, avoiding responsibility for disciplinary issues. These shortcomings highlight deficiencies in leadership and responsibility, indicating a need for focused professional development to meet the expectations outlined by P21 (2019) for adaptability, time management, self-management, and social skills. The practices and reasons highlighted by teachers regarding the inadequacy of school principals' life and career skills align with the conceptualization of these skills in the literature. As emphasized by Yüksel (2011), it is crucial for educators to demonstrate socially acceptable behaviors and adhere to social norms in their interpersonal interactions, as this is integral to both their professional competence and the smooth functioning of the educational environment. Since the elements that make up life and career skills are interconnected and mutually reinforcing, both teachers and school principals need to adopt a holistic approach toward the various factors that constitute these skills. Simply possessing one or a few of these skills is insufficient for achieving professional competence and effectively performing one's role (Girgin, Çetingöz, & Ekinci Vural, 2011).

The research indicates that the management skills most crucial for 21st-century school principals are communication, cooperation, and teamwork. Teachers highlighted these as the key skills school principals should possess in the modern educational landscape, alongside leadership, equality and justice, empathy, responsibility, and initiative. Among these, communication emerged as the most essential skill for school principals in the 21st century. As a core human skill, effective communication stands out as a fundamental quality sought in school leaders. Principals engage in frequent communication with assistant principals, teachers, parents, students, and other stakeholders, making strong communication skills even more critical. This finding is consistent with various studies in the field that underscore the importance of human skills, including communication, for school principals (Bayrak, 2019; Kiraz et al., 2022; Konan, Çetin, & Çelik, 2018).

The majority of teachers emphasized that to enhance the application of essential management skills in school principals for the 21st century, practical in-service training and seminars should be provided, and the selection of school principals should be based on fair and meritocratic criteria. One of the most fundamental expectations for selecting school principals is impartiality. The qualitative data from this research consistently highlight the importance of justice, merit, and transparency in the selection process. Furthermore, there is a clear call for the development of concrete and objective criteria for determining school administrators. These findings align with existing literature (Aslanargun, 2011; Ayral, 2016; Baydak Özan, 2014), which stresses the need for a more comprehensive approach. Aslanargun (2011), for example, points out that traditional central examination systems fail to adequately measure essential skills such as leadership, communication, teamwork, and project development. He advocates for a more practical, holistic assessment system that not only measures but also nurtures these critical skills.

Suggestion

Based on these findings, it is crucial to implement in-service training, seminars, and specialized courses to support the development of 21st-century skills in school administrators. For Turkey to establish an effective approach to managerial training, it is recommended that the Council of Higher Education (YÖK), the Ministry of National Education (MEB), academics, and all relevant stakeholders collaborate to design a comprehensive managerial training model tailored to the Turkish education system, culture, and centered on people. To enhance the effectiveness of managerial training criteria, it would be beneficial to incorporate key components such as 21st-century skills, human-centered competencies, academic knowledge, and practical school experience. This approach can make the training more hands-on and relevant. Moreover, it is suggested that postgraduate education should be mandatory, with additional opportunities for doctoral studies, international educational trips, and knowledge-sharing events with successful school administrators. These initiatives would provide administrators with the tools to develop essential 21st-century skills. As national and international literature increasingly emphasizes the importance of these skills, it is vital to continue research and implement practices focused on how school leaders can acquire and strengthen them

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