Barriers and Facilitators of Educational Sustainability: Metaphorical Perceptions and Views of Teachers

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Abstract

According to UNESCO, educational sustainability is an integral part of education. It requires participatory teaching and learning methods that motivate and empower learners to change their behaviours and act for sustainable development for lifelong learning to provide a quality system. This study aimed to reveal metaphors, barriers, and facilitators on educational sustainability based on the teachers' views. To this end, the study adopted a phenomenological   research design. The participants, selected through purposeful criterion sampling, were teachers and data came from semi-structured interviews. Findings showed that (a) educational sustainability was perceived metaphorically as continuity, order, executive action, resilience, and goal orientation; (b) the education policies, stakeholders, management style, environment, and change were barriers to educational sustainability; (c) education system, improvement of administrative processes, building a future-oriented structure, increasing quality, breaking the influence of politics in education, following the developments and considering common values should be carried out to eliminate these barriers; and (d) educational policies, creating opportunities, and administrative actions were both facilitators and practices to increase these facilitators for educational sustainability.

Keywords: Barriers to sustainability, Educational sustainability, Facilitators for sustainability, Metaphor, Qualitative method

Introduction

Sustainability often referred to as sustainable development (Dresner 2004), became prominent during the United Nations World Commission on Environment and Development (WCED) conference in 1987, and its most accepted and cited description was presented as the "Brundtland Definition" (1987) in this conference. Based on this definition, sustainability is accepted as a development that satisfies the needs of the present without risking future generations' meets. In time, sustainability and sustainable development evolved to be defined as development that meets the needs of the present without compromising the ability of future generations to meet their (own) needs with an emphasis on both equity between generations and equity within generations (Dresner 2004). Many reports such as World Conservation Strategy, Brundtland Report, and Convention on Climate Change considered the term sustainability from different angles,, including economy, environment, and biology, the United Nations Conference in Stockholm in 1972 linked these perspectives to education. This action provided sustainability to be considered in a broader way, including individual development rather than just spatial activities, and brought educational sustainability prominence (Sezen-Gultekin 2019).

Educational sustainability is directly related to sustainable development. Both theoretical and universal approaches can prove this. Based on Wang and Lin's (2017) study, one of the main approaches to   sustainability is the Triple Bottom Line, which explains sustainability through a trivet structure. This trivet composes of economy, ecology, and society. In line with this approach, it is claimed that sustainable development can only be ensured if these three categories can be supported together. Similarly, the United Nations evaluates sustainable development using these categories. All member states of the United Nations have adopted the 2030 Agenda for Sustainable Development to create a common plan for peace and prosperity for people and the planet, now and in the future (United Nations 2015).The agenda issued an urgent call for action for seventeen categories to all countries. These categories were named as 17 sustainable development goals under the following titles: no

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poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice and strong institutions, and partnerships for the goals.

Accordingly, as we have seen, sustainable development should be evaluated in terms of the economy, ecology, society, health, and education, all of which are unbreakable chains of sustainability.Selvanathan (2013) states that education is the additional fifth factor that influences the way how economy, environment, society, and culture perform in terms of sustainability. Thus, the weakness or lack of luster performance of any of the five factors is likely to negatively affect sustainability. Similarly, according to McKeown (2002), when education levels are low, economies are often limited to resource extraction and agriculture. In many countries, the current level of basic education is so low that it severely hinders development options and plans for a sustainable future.   Hence, education should have priority to provide sustainable development. Accordingly, this study focuses upon educational sustainability.

In an educational context, sustainability is the ability of individuals and schools to continue to improve to meet new challenges and complexity in a way that does not damage individuals or the wider community but builds capacity and capability to be successful in new and demanding contexts (Davies 2007). Educational sustainability means education practices that encourage students and educators are responsible and work cooperatively towards a sustainable educational environment informing society both locally and globally. It also aims to empower and equip current and future generations to meet their needs using a balanced and integrated approach to sustainable development's economic, social, and environmental dimensions (UNESCO 2014). It teaches people that their efforts, actions, and decisions impact natural resource utilization, and fosters or impedes sustainable development (Roberts 2012).

These definitions require quality education systems where learners have lifelong awareness of the 2030 sustainable goals. To provide such a quality system, it should be known that educational sustainability is an integral part of education that requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development in terms of lifelong learning (Jackson 2018; UNESCO, 2014). For this reason, educational sustainability requires a transformation of education such a way that all stakeholders including policymakers, executives, teachers, lecturers, support staff, parents, employers, and learners should worry about what needs to change and where to start that change, which factors trigger or block educational sustainability. In this way, it is more likely to develop a sustainable capacity for education.

Fullan's (2005) study also agrees with this idea, suggesting that educational sustainability in education is the ability of a system to engage in the complexity of continuous improvement that is consistent with the deep values of human purpose. To accomplish this capacity, educational sustainability implies four descriptors: educational policy and practice, which is sustaining, tenable, healthy, and durable (Sterling 2001). That's why, it is important to have educational strategies that allow for easy adaptation for both students and teachers, ensuring sustainable and continuous development of learning and teaching respectively (Alonso-García, Garrido-Letrán and Sánchez-Alzola 2021). Otherwise, it is possible to encounter any barriers to educational sustainability.

Types of barriers to sustainability can severely change across different fields. However, previous studies in the literature (e.g., de Paiva Duarte 2015; Mwanza and Mbohwa 2017) show that the main barriers to sustainability are lack of clarity of the concept, resistance to change, lack of systems thinking, political factors, inability to ensure sustainable behaviour among suppliers, and the consumer culture of global capitalism, technology, quality and demand, cost and capacity, market share and legislation, and environmental issues. Unless these obstacles are overcome, the required sustainability will not be achieved.In this context, it can be claimed that if the point is to make education sustainable, it is essential to overcome the barriers to sustainability and to create new pathways to facilitate it. For this reason, considering the ongoing importance and vitality of sustainability in the field of education, this study aims to identify the barriers to and facilitators for educational sustainability and teachers' metaphorical perceptions of it. Accordingly, this study adopted the following research problems:

According to teachers,
1. What are the metaphorical perceptions of educational sustainability?
2. What are the views on sustainability activities carried out in Turkey in education?
3. What are the factors posing barriers to educational sustainability?
4. What can be done to eliminate the barriers?
5. What are the factors facilitating educational sustainability?

6. What can be done to increase the facilitators?

Method

Design

This study adopted the phenomenology design, one of the qualitative research methods. The reason for using this pattern is to examine situations that do not seem different to us, but for which we have not developed a deep understanding (Yildirim and Simsek 2003). It is a form of qualitative research in which the researcher attempts to identify commonalities in the perceptions of several people about a particular phenomenon (Fraenkel, Wallen and Hyun 1993). In this context, an in-depth examination of the teachers' opinions about the concept of educational sustainability was conducted.

Study Group

The participants were sampled through criterion sampling, which is one of the purposeful sampling methods. According to Patton, purposeful sampling enables in-depth study of situations that are thought to have rich information. In this sense, purposeful sampling methods are considered helpful in discovering and explaining facts and events in many cases (Glesne 2012). The basic understanding in the criteria sampling method is that all situations that meet a predetermined set of criteria are studied (Yildirim and Simsek 2003). For this reason, in this study, the condition of "being a teacher who has a bachelor's degree and at the same time continues to master education on Educational Sciences" was determined as the criteria. The reasons for this are threefold: first, teachers have the potential to respond more effectively to questions about educational sustainability because they work directly in educational organizations. Second, the preference for these individuals as participants can be viewed as a sustainability movement, as teachers continuing postgraduate education are eager to learn new information and have the potential to share that information with schools. Third, giving preference to teachers who are pursuing master's degrees, especially in education, can help them see the future of the education system in terms of sustainable development and promote sustainable steps in education firsthand.In this context, the study group of the research consisted of twenty-four teachers studying for their master's degree at Sakarya University Institute of Educational Sciences. The demographic information about the study group was presented in Table 1.

Table 1. Demographic information about the study group

Variables		f	%
Gender	Female	4	20
	Male	20	80
Professional seniority	6-10 years	1	5
	11-15 years	7	32
	16-20 years	10	45
	21+ years	4	18
Administerial seniority	1-5 years	6	33
	6-10 years	6	33
	11-15 years	4	23
	16-20 years	2	11
	21+ years	-	0
Type of school	Primary School	8	36
	Secondary School	6	27
	High School	7	32
	Others (Public Education Center)	1	5

Data Collection

A semi-structured interview form prepared by the researchers was developed to elicit the opinions of the teachers. Semi-structured interviews are well suited for exploring the perceptions and opinions of respondents regarding complex and sometimes sensitive issues as well as enabling them to probe for more information, and clarification of answers. Also, the participants' varied professional, educational, and personal histories preclude using a standardized interview schedule (Barriball and While 1994). In this context, six questions were asked in the form about the metaphorical perceptions, barriers, and facilitators related to educational sustainability, and what could be done to remove these barriers and increase these facilitators. For the fill-in-the-blank statements, a short instruction was given at the top of the form on what the metaphor is, what should be done in the form, and how

much time they have. The developed form was presented to three experts, one of whom was an expert in language teaching and two of whom were experts in education. These experts evaluated the form in terms of linguistic, scientific, and structural aspects. According to the experts' feedback, the form was finalized and included the following questions.

1. In my opinion, educational sustainability is …………… like because ………………… .
2. What are your views on sustainability activities carried out in Turkey in the field of education?
3. In your opinion, what are the factors that pose barriers to educational sustainability?
4. If you were to develop an education policy, what would you do to eliminate those barriers to educational sustainability?
5. In your opinion, what are the factors that facilitate educational sustainability?
6. If you were to develop an education policy, what would you do to increase those facilitators for educational sustainability?

Validity and Reliability

According to Lincoln and Guba, qualitative research does not test the traditional validity and reliability criteria of quantitative research, such as internal-external validity, reliability, and objectivity, but instead tests validity and reliability based on "credibility, transferability, dependability, and confirmability" (Jackson 2007).. For this reason, in this qualitative study, the following principles were followed to ensure validity and reliability by considering the criteria of credibility, transferability, reliability, and approval.

In order to ensure credibility, (1) the developed form was presented to expert opinion and the form was finalized in line with their feedback; (2) the responses from the participants were adhered to the study and the direct quotations from these responses were presented in the study; (3) in addition, the observer duplexing method was used in the evaluation of the obtained answers so that different perspectives evaluated the data and a common result was reached. Moreover, among the purposive sampling types, the criterion sampling method was preferred to ensure transferability, reliability, and objectivity. Accordingly, the study group (1) was defined in detail so that it could be compared with other samples; (2) was diversified by recruiting postgraduate students who had first-hand exposure to the topic and were studying in different disciplines (i.e., educational administration and supervision, educational programs, and teaching). For the reliability of the study based on the observer duplexing, the intercoder reliability formula developed by Miles and Huberman (1994:64) was used: "Intercoder reliability=number of agreements / total number of agreements + disagreements". In this context, the opinions of two different experts on the coding were compared, and intercoder reliability was 98%. According to Miles and Huberman (1994), a compliance percentage above 70% is considered sufficient. Accordingly, the reliability of the study was ensured with the compliance value.

Findings

The findings for educational sustainability were categorized in the following tables, and the participants had a chance to state more than one view.

Table 2. Categorization of metaphors for educational sustainability

Categories	Metaphor Codes
Continuity (f=10)	Relay, mill, a journey from the past to the future, necessity, human life, uninterrupted reaching the goal, civilization, continuation of the generation, rainfall cycle, walking action
Layout (f=3)	Striving human, night and day, life
Execution action (f=3)	Air-water-food, organism (f=2)
Resilience (f=2)	Pine tree, state's most important body
Goal focus (f=2)	Education policy, a delicate plan
Other (f=2)	Football team with many alternative footballers, flow of a river

Table 2 present the categories created by examining the reasons for the metaphors that the participants produced for educational sustainability. In this context, it was seen that educational sustainability is grouped under the categories of continuity, order, executive action, resilience, goal orientation, and the others. In this case, it can be stated that educational sustainability was mostly perceived as continuity. The expressions regarding categories can be exemplified as follows:

P4: "In my opinion, educational sustainability is like human life. Because human life is consistent with evolution." (Continuity category)
P3: "In my opinion, educational sustainability is like night and day. Because it should be continuous, steady, and consistent, not from evening to morning. Fifty teachers change up to a child complete the school…" (Layout category)
P2: "In my opinion, educational sustainability is like an organism. Because you cannot keep the organism alive and develop the factory without a sustainable education." (Execution category)
P12: "In my opinion, educational sustainability is like a pine tree. Because it is always upright, green, and strong. It blossoms once in 100 years. The activities should be sustainable since its future will be planned." (Resilience category)
P20: "In my opinion, educational sustainability is like a delicate plan. Because it is possible with a good planning in which education should be commended to competent people…" (Goal focus category)
P19: "In my opinion, educational sustainability is like a flow of a river. Because it is dealing with dynamic and living beings." (Goal focus category)

Table 3. Categorization of participants' views on educational sustainability activities implemented in Turkey

Categories	Codes
None (f=27)	Lack (f=13), continuous change (f=5), limited education (f=2), discarding the old ones, continious new applications, being not suitable for needs, short-termism, populist policies, unconsciousness, limitlessness
Yes, but insufficient (f=6)	Exist but irregular, yes but not consistent and valuable, insufficient, plans are not left to experts, insufficient, implementations are made independently from stakeholders, not welcomed, insufficient, incomplete, false, non-national practices exist, yes but inadequate, good managers are essential
Yes, but developing (f=3)	Yes, development of new programs, technological infrastructure, developing, available through various applications

When the teachers' opinions were examined, it was seen that one participant did not answer this question. In contrast, the three participants did not comment for sustainability activities in education in Turkey although they were knowledgeable about sustainability. For this reason, the data on these 4 forms was not included in the analysis, and the data on the remaining 20 forms were evaluated. There were some participants who thought there were no sustainability activities in the way that they were taught in Turkey. Some participants said there were activities, but they were not enough; some participants said there were activities and they were growing over time.In this case, it was seen that the most repetitive category among the categories was "none". All in all, majority of teachers thought there are no activities related to educational sustainability in Turkey. In contrast, very few of them stated that there are some practices regarding this issue. In this case, based on the feedback from participants, the activities towards educational sustainability in Turkey are almost none at all, which can be considered inadequate. The expressions regarding categories can be exemplified as follow:

P18: "In Turkey, education is planned to reach the short-term goals. It is not thought too far ahead, and a result cannot be the starting point of another thing." (None category)
P3: "It is not consistent and valuable. For example, 4+4 system, TEOG system, university entrance exam, vocational high schools. Stability is important. How much we educators trust in education?" (Yes, but insufficient category)
P: "Recently, scientific progress has been made with the improvement of new programs and technological infrastructures. This shows that we have caught up with the era in a certain way…" (Yes, but developing category)

Table 4. Categorization of factors posing a barrier to educational sustainability

Categories	Codes
Barriers related to educational policy (f=53)	Not achieving goals, dependencies, not being holistic, rapid change, low teacher quality (f=3), unchanging teaching methods, unchanging paradigms, emptying the contents of textbooks, course materials, education not being independent, political interference in education (f=4), lack of educational spirit, heads of education not being "educators", separating education from civilization, education not being suitable for national interests, economy, memorization, incompetent transactions (f = 3), financial difficulties (f = 2), curriculum, controversy, not addressing needs, employment pattern (f = 2), lack of

	education of decision-making politicians, lack of objective criteria, teachers' attitude, unrelated student, unplannedness (f = 2), political concerns, indecision of politicians, lack of a resilient educational infrastructure (f = 2), union interventions, frequent manager changes, system, not paying attention to sustainability, leaving sustainability to people rather than legislation, not identifying processes correctly, uniform education, wrong training policies, inadequate managers (f = 2), managers' perspective
Barriers related to stakeholders (f=18)	Not including families in education, fanatic thinking, unconscious students, unconscious community members, unconscious parents, gender, satisfaction, education level, lack of awareness about education, willingness to continue daily routine, culture level, spirituality, belief that education is completely finished after formal education is completed, parent complaints, age, lifestyle, lack of time, mentality and perception
Barriers related to management style (f=10)	Lack of communication between subordinates and superiors, egocentricity, public relations, conflicts, lack of control, lack of power of school administration (f=2), prejudice (f=2), not being encouraged
Barriers related to the environment (f=9)	Geographical location, an institution of work, environmental deterioration, unchanging school environment, physical impossibilities, health problems, increasing cities, single-mindedness, traffic stress
Barriers related to change (f=5)	Impotence to development, increase in technology, inability to keep up with technology, failure to follow new developments, the difference in the concept of a new generation family

In In Table 4, the teachers' opinions about the factors posing barriers to educational sustainability are presented under different categories. When these categories were examined, it was seen that according to the teachers, educational sustainability could be prevented due to the categories of barriers related to education policies, stakeholders, management style, environment, and change. When the categories were perused within themselves, the most potent barriers to educational sustainability in the educational policies category were relatively political interference in education, low teacher quality, incompetent operations, financial difficulties, employment style, unplannedness, and lack of resilience educational infrastructure, and inadequate managers. In contrast, the most potent barriers to educational sustainability in the management style category were school administrators' lack of power and prejudices. In this case, it can be stated that although educational sustainability is affected by different factors, it is mostly hindered by the factors originating from educational policies. The expressions regarding categories can be exemplified as follow:

> P14: *"Political concerns, separating education from civilization." (Barriers related to educational policy category)*
> P23: *"Policy and partisanship, mindset and perception, fanaticism (blind adherence to one's own opinion, insistence." (Barriers related to stakeholders category)*
> P7: *"Lack of subordinate-upper communication." (Barriers related to management style category)*
> P5: *"Traffic stress, increasing cities, environmental deterioration." (Barriers related to the environment category)*
> P11: *"Failing to keep up with changing technology, new generation family concepts' being different in every aspect, educational institution employees' being not open to change." (Barriers related to change)*

Table 5. Categorization regarding practices to eliminate the barriers to educational sustainability

Categories	Codes
Practices for the regulation of the education system (f=17)	Establishing a fair and transparent education system, Providing little, concise, clear information, increasing skill applications, researching how to use knowledge, researching how to reach knowledge, not changing the education system much, nationalizing education, large-scale projects, subjects open to interpretation, curriculum change, students directing to applied education, practicing, creating a fixed examination system, preventing system change, making applications, informing at the university level, removing the university exam
Practices for the improvement of administrative processes (f=8)	Not granting the right to appoint a teacher who is in the first year for four years, in-service training, consultation, establishing a merit-based, and objective assignment system, to carry out activities that attach importance to motivation, to ensure that school principals form their working staff and supervise them, to make schools ready to expand the authority of school principals, doing business based on results

Practices for building a future-oriented structure (f=7)	Developing the understanding that will ensure that education is long-lasting, preventing daily policies, not allowing short-term policies, legal promotion of sustainability (f=2), determining a roadmap for sustainability (plan), creating sustainability policies
Practices for increasing quality (f=6)	Raising the standards of the educator, employing competent people, providing vertical mobility in the staff, removing the educated illiterate from education, taking the opinions of the teachers through questionnaires, doing not only exams but also oral exams and process evaluations in the recruitment of practice teachers
Practices for breaking the influence of politics in education (f=5)	Fight against addiction, transferring education from politicians to educators, de-politicizing education, not allowing intervention of different groups in education, removing all union activities
Practices for following the developments (f=5)	Renewal of the environment, creating programs under the changing order, examining developed countries in education, ensuring that teachers keep themselves up to date, introducing technology into schools in a controlled manner
Practices for considering common values (f=3)	Implementing not individual but social ideas, gaining universal values, informing the public

Table 5 shows the teachers' perspectives on actions that may be implemented to eliminate the issues that are preventing educational sustainability.. According to the teachers, the practices related to the regulation of the education system, the improvement of administrative processes, building a future-oriented structure, increasing quality, breaking the influence of politics in education, following the developments, and considering common values could eliminate the barriers to educational sustainability. In this case, even though it was stated that the different practices could be made to eliminate the factors that pose barriers to educational sustainability, it can be put forward that the practices for the regulation of the education system are the most preferred. The expressions regarding categories are exemplified as follows:

> P15: "I would prevent the system changes. For example, minor arrangements can be done for the duration of the university and high school exams based on a fixed roof. However, short-termed radical changes destroy all the studies made depending on these exams. To me, this is the basis of the case." (Practices for the regulation of the education system category)
> P12: "I would pay attention to the studies giving importance to motivation." (Practices for the improvement of administrative processes category)
> P22: "I would issue a regulation on standards and sustainable education environments that would cover all the institutions of the Ministry of National Education." (Practices for building a future-oriented structure category)
> P7: "I would ensure that good examples are evaluated, and professional help is obtained from specialist organizations." (Practices for an increasing quality category)
> P4: "I would say that education is the work of the educator and withdraw the hands of the politicians. I would also remove all the union activities." (Practices for breaking the influence of politics in education)
> P8: "I would introduce technology into schools in a controlled manner." (Practices for following the developments category)
> P14: "Universal values should be given to children." (Practices for building considering common values category)

Table 6. Categorization regarding factors facilitating educational sustainability

Categories	Codes
Facilitators for educational policy (f=33)	Advancing step by step, research, dynamic education studies, continuing the education system without interruption, raising awareness (f=2), updating education policies, establishing a quality structure (f=13), determination, going from easy to difficult, merit-based assignment, curiosity waking up (f=2), supporting original ideas, system not changing much, politicians' view of education, evaluation of results, developing inquiry, establishing standards, implementation, being open to innovation
Facilitators for creating opportunities (f=29)	Geographical possibilities, providing family support for children to love school, creating a democratic environment (f=4), state support, educational opportunities (f=3), strong financial opportunities (f=5), needs (f=2), socio-cultural environment, conditions and environment, utilization of technology (f=4), accessibility (f=2), applicability (f=2), long-term plans, free education

Facilitators for administrative actions (f=11)	Deciding together (f=2), discipline, being sensitive, sincerity in communication, showing interest, motivation (f=2), awards, practitioner-centered acting, sanctions.

In Table 6, the teachers' opinions about the factors that facilitate educational sustainability are summarized. According to the teachers, educational sustainability could be facilitated by the factors related to educational policies, creating opportunities, and administrative actions. When the categories were examined further, it was observed that in the category of the facilitators for educational policies, among the factors that mostly facilitate educational sustainability were as follow: establishing a quality structure, strong financial opportunities, creating the most democratic environment for facilitators, technology utilization, educational opportunities, arousing curiosity, raising awareness, needs, accessibility, feasibility; in facilitators towards managerial actions, the most common decision-making, and motivation. Thus, it can be argued that although the sustainability of education is influenced by various factors, it is primarily influenced by the promoters of educational policy. The expressions concerning the categories can be illustrated as follows:

> P16: "Administrative competence, merit-based appointment, actionable decisions" (Facilitators for educational policy category)
> P7: "Acting in consensus, sincere communication, practitioner-centered action." (Facilitators for creating opportunities category)
> P4: "Arousing curiosity, motivation, research, questioning, application." (Facilitators for administrative actions category)

Table 7. Categorization regarding practices to increase the factors facilitating educational sustainability

Categories	Codes
Facilitators for educational policy (f=22)	Increasing the research and development centers, updating the success evaluation system, increasing the skills training, considering the expectations and requests (f=4), keeping the education at the level of civilization, making a future plan that recognizes the past, reducing mistakes, establishing a permanent education policy, increasing the cultural level, establishing a national education policy (f=3), promoting sustainability by creating exemplary institutions, pilot applications, professional and ethical assignment, avoiding frequent system changes, inclusion of sustainability in the curriculum, arrangement of appointments, competency-based orientation
Facilitators for creating opportunities (f=10)	Providing various educational opportunities, raising awareness through education (f=5), organizing activities for educators, giving gift books, increasing technology, increasing artistic activities
Facilitators for administrative actions (f=9)	Expanding the powers of school principals, determining the criteria, ensuring the satisfaction of the staff, preventing unwarranted complaints, making the clerical and training meetings effective, increasing the municipal development courses, inter-institutional dialogue, strengthening the stakeholder relationship, activating local administrations

Table 7 shows teachers' perspectives on activities that could be performed to improve the factors that promote educational sustainability. Teachers feel that elements such as educational policy, opportunity development, and administrative measures can help to promote the long-term viability of education.. When the categories were examined within themselves, the factors that primarily increase the facilitation of educational sustainability were considering expectations and demands and establishing a national education policy, while raising awareness through education was the one in the category of the facilitators for creating opportunities. Overall, it can be claimed that although different factors increase the facilitation of educational sustainability, the facilitators of education policies are the one that is likely to increase the facilitation. The expressions regarding categories can be exemplified as follows:

> P15: "Each young person's choice of occupational groups according to their skills will ensure the smooth functioning of all systems to be applied in education." (Facilitators for educational policy category)
> P3: "There should be activities and workshops in which educators participate." (Facilitators for creating opportunities category)
> P19: "organizing cultural tours, in-service training, gift books, inter-institutional dialogue." (Facilitators for administrative actions category)

Conclusion, Discussion, and Suggestions

Metaphors

In this study, different metaphor codes related to the concept of educational sustainability were produced. Although these metaphors were collected in the categories of sustainability continuity, order, execution, resilience, and goal-orientation, it was found that educational sustainability was mainly perceived as continuity metaphorically. The concept of sustainability in the literature also reflects continuity in its essence, and researchers such as Coblentz (2002), Wals and Schwarzin (2012), Kapitulčinová, AtKisson, Perdue, and Will (2018), and Sezen-Gultekin (2019), Sezen-Gultekin and Argon (2020a; 2020b) also define sustainability in terms of continuity through expressions such as resilience, stability, continuity, the search for balance, and the pursuit of a future. Accordingly, it is recommended that the concept of educational sustainability should be focused on continuing in line with the objectives; however, in addition to this, it should be perceived as establishing order, carrying out actions, focusing on the target and being resilient. Moreover, it can be thought that these results refer to the primary needs of the COVID-19 pandemic period since the continuous, resilient, aim-focused, regular systems have more chances to sustain human life. To this end, the concept of educational sustainability should be referred to in a broader sense. Also, a comparative study on determining the educational sustainability metaphorically before and during the COVID-19 process could be investigated in further studies.

When teachers were asked about educational sustainability practices implemented in Turkey, the majority indicated that there were no such activities and that existing activities were insufficient. However, a small number of teachers indicated that there are some activities, such as the development of technological infrastructure. These results can be considered remarkable in terms of ensuring sustainability in education. Given that teachers are both in the system and try to continue their education with their own efforts, it should be considered that they think that there are no educational sustainability activities in the Turkish education system.

Furthermore, earlier studies conducted in the Turkish context (e.g., Kayihan and Tonuk 2008, 2011; Ozdemir 2010; Ozdemir and Corakci 2011; Toran 2016) show that many studies in Turkey mostly remained at the level of environmental sustainability. Although some National Education Directorates (NEDs) have addressed the issue of sustainability in education, such as Gaziantep Province NED (2019), Yalova Province NED (2020), and Etimesgut District NED (2020), the Turkish Ministry of National Education, which oversees all schools in Turkey, has taken no concrete steps. As a result, in order to ensure educational sustainability, which has been and will continue to be important for years, it is necessary to conduct special studies in the Turkish education system and develop strategies by organizing activities not only from an environmental standpoint, but also from an economic, cultural, social, and administrative standpoint. During the COVID -19 pandemic, the value of these discoveries was once again demonstrated. As a result, adopting solutions for long-term education is not a choice, but a need.

Barriers

Educational policies, stakeholders, managerial style, environment, and change were all identified as barriers in the study. Furthermore, low teacher quality, political intervention in education, incompetent transactions, financial challenges, type of work, lack of planning, lack of sound educational infrastructure, and insufficient administrators were among the most common comments. These findings are significant because removing barriers to education can help to sustain educational systems. On the other hand, while several hurdles to educational sustainability have been highlighted in the international literature, there is no study in the literature that explicitly tackles the barriers to educational sustainability of education systems in Turkey.

For example, according to Milbrath (1995), some of thre barriers stem   from deficiencies in consciousness, knowledge, and information. Some teachers may not have sufficient information about educational sustainability resulting in poor practice in the classroom and the school. Kang (2019) suggested   that teachers taking courses on education for sustainable development in pre-service teacher education were about five times more likely to contribute to the practices related to educational sustainability. In addition, according to Joyner-Wells (2006), educational sustainability may be difficult to achieve because of incompatibility between the beliefs and assumptions that provide the foundation for the whole school reform initiative and those of the individuals who will be implementing the program. Continuation of whole-school reform over time requires a continuous commitment to enacting expectations, assumptions, beliefs, and strategies of the adopted improvement initiative. Akins and his colleagues (2019) also found that management   and policy makers' lack of support significantly affects the success of practices related to educational sustainability. Hargreaves (2007) states that there are some enemies of educational sustainability like enforced short-term goals, extreme testing, and rapid political wins at the expense of deep learning for all students.

As can be seen, there are many barriers to educational sustainability, and these barriers vary depending on the situation. For that purpose, it is recommended to accurately identify barriers to educational sustainability in detail. In this way, early, appropriate, and satisfactory steps could be taken to eliminate factors posing barriers to educational sustainability. One of the most critical steps in achieving this is the more active evolution of education policies and development plans towards educational sustainability. After all, within the scope of the Turkish 11th Development Plan (Turkish Presidency Strategy and Budget Office n.d.), sustainability has been mainly addressed in terms of environment, tourism, and health. Therefore, it is recommended to address this situation in more detail in the 12th Development Plan regarding educational sustainability and active policies. In addition, to eliminate the factors constituting barriers to educational sustainability, it is suggested that the implementation of practices aiming to organize the education system, improving administrative procedures, establishing a future-oriented structure, increasing quality, breaking the influence of politics in education, following developments, and considering common values should be set to work.

Facilitators

Educational sustainability was considered as most conducive to aspects such as raising awareness, building a quality structure, and sparking interest in the study, while there were also favorable elements for educational policy, opportunity creation, and administrative action. These findings appear to be in line with what has been published in the literature. Ensuring educational sustainability involves keeping a school system alive, meeting the needs of students, teachers, and parents with the services it provides, and educating students to adapt to the conditions of life in the future. The multi-dimensional nature of educational sustainability implies more than one factor that facilitates educational sustainability (Koybasi Semin 2019). However, the facilitators of educational sustainability as well as its facilitating roles on other things.

As far as the literature has been accessed, there is no study explicitly addressing the facilitators for educational sustainability in the Turkish education system, but there have been numerous studies on the facilitators for educational sustainability in the foreign literature. For example, one of the most effective facilitators of educational sustainability is sustainable leadership performed by educational leaders. Sustainable educational leadership maintains and improves deep learning, which positively benefits people around us continuously (Hargreaves 2006). From another perspective, according to Chen and his colleagues, if sustainable education is to be accomplished, a sustainable development plan which contains personal and social practices should be carried out (Burbules, Fan and Repp 2020). Furthermore, open pedagogy, interaction with communities and society, and lifelong learning should all be considered in order to ensure educational sustainability, as the concept of "breadth of life" (Jackson 2011) provides insight into an educational institution's ability to recognize and value learning and personal growth, which is necessary for success and personal fulfillment in a complex world. All of these findings are identical to the ones reported in this study.

As can be seen, there are many different facilitators of educational sustainability. Therefore, it is important to increase these facilitators, use them for their intended purpose, and spread them. For this reason, it is recommended that the educational policies emerging as a result of this study, namely creating opportunities and managerial actions, should be put into practice actively. Kang (2019) put forward that in-service training activities are very useful tools to improve teachers' knowledge and skills on educational sustainability. Based on the results of this study, we also suggest organizing in-service training activities for teachers. Pre-service teachers might also be encouraged to take courses about educational sustainability during their pre-service education. Future research is suggested to study barriers and facilitators to educational sustainability in higher education contexts. Furthermore, comparative studies should be done through in-depth analysis of educational sustainability, barriers, and facilitators, including before and during the COVID-19 pandemic.

Limitations

This study has some limitations: First, it was conducted through phenomenology, examining situations to identify commonalities in the perceptions. Future studies can be designed with other methodologies such as quantitative or mixed type methods to reach different and more generalisable results. Second, data were collected only via the semi-structured interview form prepared by the researchers. Future studies can use different data collection tools by expanding the context of this form. Third, the sample size was small, which was limited with twenty-four participants. However, there were two reasons behind this: The authors tried to reach all of them since the participants were master students at a state university. Although metaphor studies can be conducted with much more participants, this study used a phenomenology design and asked for both metaphors and views at the same

time. So, it would have been too complicated to have s larger sample. Qualitative studies do not require a certain number of participants since they do not aim to generalize the results. Due to these reasons, the participants were limited to this number. Fourth, it is also limited to the teachers who were selected by certain criteria, which was being a teacher who has a bachelor's degree and pursuing master education at the same time. Future studies can change or expand this number and criteria to evaluate different views on educational sustainability.

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Author (s) Contribution Rate

Both researchers contributed at every stage of the research.

Conflicts of Interest

Authors declare that they have no conflict of interest.

Ethical Approval

Ethical permission (E-61923333-050.99-124076) was obtained from Sakarya University Rectorate Ethics Committee for this research.

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