

The Role of Educational Administration in Achieving Sustainable Development in Public Education in the Kingdom of Saudi Arabia during the Corona (COVID-19) Pandemic

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Abstract: The present research aims to identify the role of educational administration in achieving sustainable development in public education during Corona (COVID-19) pandemic. The authors utilized the qualitative descriptive approach. The results showed that Saudi Arabia's vision 2030 has paid great attention to sustainable development, which focuses on the environmental, financial, infrastructure and social dimensions of sustainability. However, public education departments have not fully implemented sustainable development. Moreover, the research presents some suggestions for developing the role of educational administration in achieving sustainable development in public education during COVID-19 pandemic in terms of its different dimensions. For instance, educational content should focus on raising awareness of the risks of epidemics as well as adopting distance learning that helps achieve equality.

Keywords: Educational administration, Sustainable development in education, Public education, Corona pandemic.

1 Introduction

Most countries have looked into ways to employ education for sustainable development in their various educational systems. Researchers contend that education is the impetus for achieving sustainable development, which is not a phenomenon or a new interest restricted to one country, but an important requirement imposed by the nature of life. In the light of the challenges caused by the contemporary changes and the increasing global interest in adopting sustainable development in all sectors throughout the past years, Saudi Vision 2030 has focused on implementing sustainable development requirements and indicators in the various sectors. It also asserts the prominent role of the human element as a means and goal of development. It has been interested in educating youth to achieve sustainable development and keep pace with the rapid developments.

The first decade of the 21st century is characterized by development at all levels, including environmental awareness, innovation, and the need to strike a balance between achieving economic development; maintaining environmental balance; and promoting the culture of non-depletion of natural resources or what is now referred to sustainable development (Ramos et al., 2018). Interest in

sustainable development issues has increased as well as its local and global effects have been noticeable. Moreover, the progress of the countries has been measured by the extent of their interest in these various developmental areas (Al-Maamari & Al-Nazari, 2017). Education for sustainable development is substantial for educational institutions because it fulfills human needs. It requires the educational institutions to have trained and administratively qualified teaching staff that can develop plans and programs (Al-Khawaldeh, 2016).

The significance of education for sustainable development has increased in all stages of the educational system, including public education. The United Nations designated the period (2005-2014) as a decade of education for sustainable development to motivate countries to implement education for sustainable development, considering education as the driving force for the essential change. UNESCO was appointed as the leader of this decade and Member States were encouraged to incorporate the decade's goals into their local education plans (Liu, 2009). The goal of this decade was to include sustainable development principles, beliefs, and applications into all aspects of teaching and learning. Although there has been progress in achieving education for sustainable development globally, the Arab countries do not consider it, according to UNESCO's final report on the decade of education for sustainable development (UNESCO, 2014).

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A community that is fully aware of sustainable development goals and has the knowledge and abilities to contribute to these goals is needed to achieve sustainable development (Brunold, 2015). It cannot only be achieved through technological solutions or political systems, but the world needs to modify its way of thinking and view, which is achieved through changing the quality of education (UNESCO, 2019).

Despite the increasing global interest in adopting sustainable development from inside and outside the education sector, sustainable development in education is still observed as an emerging and new concept (Hill, 2012). According to studies, public education systems are still in the early stages of adopting sustainable development. This requires the public education departments to lead this transformation, provide adequate support and resources, empower the administrators participating in the transformation towards sustainable development, as well as regularly examine progress.

Countries have made the trend towards education for sustainable development one of their priorities to achieve global competitiveness, where sustainable development has become a significant foundation of competitiveness and an indicator of the level of progress in the international classifications adopted by UNESCO. In support of this, the United Nations renewed its commitment to activate the role of education by moving forward with sustainable development on 10-12 November 2014, reflecting Governments' interest in implementing the principles of sustainable development (UNESCO, 2014).

Through all areas of work described in Chapter 36 of Agenda 21, which calls for efforts to foster learning opportunities by targeting unsustainable practices and enhancing the quality of life around the world, education has been critical to achieving sustainable development (Tilbury, 2010; UNESCO, 2010). Several studies have emerged from teachers' agreement on the importance of applying sustainable development and their concern for the application of education for sustainable development (Fien, 2006; Parker, 2008; Madsen, 2013; Kadji-Beltran et al. 2013; Green et al., 2014). In its current form, however, education cannot meet the requirements of sustainable development or sustainable education, so it must be upgraded to be more interactive, integrated, and forward-looking as well as schools should be ideal, healthy, and sustainable democratic places for sustainable development (UNESCO, 2019). The efforts of education departments in different countries and their practices and programs must also be clarified to promote the idea of sustainable development.

Sustainable development is receiving increased attention in management theory and practice and promoting the values of social justice, equality, and ones' participation in the industry and administrative decision-making. Concern with sustainable development helps manage risks (Leuenberger, 2007). Mahmoud, Abu Fouda, and Mahmoud (2013) aimed to define sustainable development aims and the availability

of its environmental, educational, and economic dimensions in vocational and technical education institutions. The results revealed a low percentage of the availability of economic and environmental goals, but a high percentage of that of educational sustainable development goals.

Wales (2013) addressed the nature of sustainable development and the relationship between human resource management and achieving sustainable development. The results showed that the adoption of sustainable development practices has become inevitable after the worldwide economic crises. Moreover, achieving sustainability of any institution depends on its social and economic circumstances. Furthermore, the adoption of long-term financial policies to achieve sustainable financing is an important matter if the institution seeks to accomplish sustainable development. Darcy et al. (2014) asserted the role of human relations and knowledge management among the personnel as an important requirement to achieve sustainable development.

Neubert and Dyck (2016) proposed an alternative theory of management practices in modern institutions to prove the adequacy of the theory of sustainable management in the development of institutional practices. Galleli, et al. (2018) defined how to link human competencies in sustainable strategic management within the institutions. The results showed that despite the importance of human competencies in the success of sustainable strategic management, institutions are unaware of how to achieve the concept of sustainable strategic management to benefit from human competencies.

COVID-19 pandemic has effects and consequences on social, economic, and cultural life practically worldwide. It has also affected the schooling dimension in its regular functioning, namely with the temporary closure of schools and the impracticality of face-to-face classes. Although Coronavirus is a health crisis, it has affected multiple sectors, such as economy and education. It particularly affected education due to adopting social distance and closing schools and universities. UNESCO has issued a global report on the decision of schools and universities closure in most countries worldwide, which has affected (290) million students worldwide (UNESCO, 2020).

The field of administration, in general, and educational administration, in particular, also goes through the practice of continuous rethinking and renewal. Globalization, with its various dimensions of knowledge and technological explosion and cultural and economic openness, has created the need for sustainable development in administrative practices in order to fulfill the current and future needs of institutions, especially the educational ones, i.e. institutional sustainable development.

In Arab countries, education for sustainable development faces the following challenges. One challenge is the insufficient understanding by those concerned with the

education of the broad concept of education for sustainable development and its nature. Further, the broad nature of education for sustainable development, which poses a great challenge to integrate it into school subjects as this nature makes it intertwined with all educational materials and activities. Another challenge is indicated by UNESCO (2008) and Togo & Lotz-Sisitka (2013) concerning wars and conflicts which represent a challenge not only to education for sustainable development, but also to countries' development and the continuity of life for large segments of people. Hence, some global systems have adopted the designs and principles of sustainable development in public education departments to provide an appropriate educational environment that assists achievement and saves money, energy and other resources (Olson & Kellum, 2003).

Sustainable development is the administrative trend that plays a prominent role in contemporary organizational strategy (Sulaiman, 2020). With the increasing global interest in adopting sustainable development in all sectors during the past years, Saudi vision 2030 has paid great attention to sustainable development, which focuses on the environmental, financial, infrastructure and social dimensions of sustainability. Saudi National Transformation Program 2018-2020 focused on sustainable development as one of its eight dimensions. Furthermore, the plan for university education in the Kingdom of Saudi Arabia "Afaq 2029" indicated the importance of achieving sustainable development focusing on the social, economic, and financial pillars of sustainability (Al-Omari, 2020).

Saudi vision 2030 attempts to achieve the requirements and indicators of sustainable development, so the relevant strategies and plans have been prepared. From this sense, a noble royal decree No. 49346 dated 20/7/2017 was issued to include sustainable development goals in education curricula and direct the Ministry of Education to coordinate with the relevant authorities its implementation. Moreover, an assessment was conducted to measure the extent to which the vision goals are connected and aligned with the sustainable development goals. The results showed much consistency between the two frameworks and their timeline which extends to 2030 (First National Voluntary Review, 2018).

Vision 2030 focuses on the national transformation of (24) government departments based on economic and development sectors. The most prominent one is the Ministry of Education. The project management program and other programs and indicators are consistent with the sustainable development goals (Al-Aql, 2021). In this sense, the Kingdom has begun to align its national strategies in various sectors with the goals of sustainable development, considering the integration between its various dimensions.

Accordingly, Saudi Arabia seeks to keep pace with sustainable development issues and trends as well as achieve its requirements by reinforcing the connection between education and sustainable development to cause sustainable educational development. It is represented in

the inclusion of aspects related to the concepts of sustainable social, environmental, economic and institutional development in the educational curricula and integrating the goals and indicators of the development into the government's development plans and programs that are being prepared and refined within the framework of the Kingdom's Vision 2030 document (Al-Anzi, 2021).

Despite the importance of the trend toward sustainable development in public education, there are few studies in Saudi Arabia that have tackled this topic in public schools. There are few local and Arab research on the role of education departments in implementing sustainable development in schools. As a result, the current study was conducted to address the requirements for achieving the goals of the sustainable development strategy, as well as international trends in the field of education for sustainable development, which necessitate its application at all levels of education, particularly public education, in order to spread its principles and prepare future generations.

The authors address the efforts of some countries in sustainable development in public education. This perspective research also argues that these conditions may be a pivotal moment of opportunity for the reformulation of teaching, notably with the implementation, development, and dissemination of digital technologies, among teachers and students. Thus, the research may be of special interest for the contributions it can provide to the stakeholders involved in public education. It also provides insights into the management and policy decision-making processes and clarifies how they contribute to the road mapping of educational departments in achieving sustainable development in education.

The present research defines the proposed role of Saudi public education departments in the transformation towards education sustainability. Studies considered public education as the key that helps nations achieve sustainable development.

In the following sections, we discuss objectives of education for sustainable development. We then express the fundamentals of education for sustainable development. We describe aspects of education for sustainable development. We also detail the dimensions of education for sustainable development and the role of educational administration in achieving sustainable development of education. Additionally, we refer to efforts of educational administration in various countries to achieve sustainable development in public education. We highlight efforts of the Kingdom of Saudi Arabia towards the sustainable development goals. In addition, we discuss Corona (COVID-19) pandemic and achieving sustainable development. Further, method, results and discussion are presented. Moreover, a list of suggestions, limitations and conclusion are stated.

Questions

1. What is the theoretical framework for the sustainable development of education in the contemporary educational literature?
2. What is the role of the educational administration in achieving the sustainable development of education in the contemporary educational literature?
3. What are the most important global trends concerning the role of the educational administration in achieving sustainable development in public education in the contemporary educational literature?
4. What are the most important efforts made by Saudi Arabia to achieve the goals of the sustainable development of education at the present?
5. What are the most important proposals for developing the role of the educational administration in achieving sustainable education during the Corona Pandemic (Covid-19)?

Objectives

The research aims to identify the theoretical framework for the sustainable development of education in the contemporary educational literature, the role of the educational administration in achieving the sustainable development of education in the contemporary educational literature, the most important global trends concerning the role of the educational administration in achieving sustainable development in public education in the contemporary educational literature, the most important efforts made by Saudi Arabia to achieve the goals of the sustainable development of education at the present and the most important proposals for developing the role of the educational administration in achieving sustainable education during the Corona Pandemic (Covid-19).

Significance

- The study of sustainable development and its various goals is of great importance because of its direct relationship with the aspects of education and its active role in the educational process.
- Keeping pace with the administrative trends that assert the need to develop the educational administration and inform the officials of the importance of this development in accordance with the requirements of sustainable development.
- This research adds to the previous literature and enriches the Arab library with a study on sustainable development.
- It helps define the roles of educational administration in achieving sustainable development goals, which can be used in formulating education policies.
- It contributes to drawing a research map of the scientific ideas related to the roles of educational

administrations in achieving the goals of sustainable education by stating the proposals that can be implemented to best comprehend the roles of education in achieving the goals of sustainable development.

Limits

Objective limits

- Aspects of education for sustainable development, including the objectives of education for sustainable development, the fundamentals of education for sustainable development, sustainability of education, dimensions of education for sustainable development, the role of educational administration in achieving sustainable development of education and the efforts of educational administration in different countries to achieve sustainable development in public education.
- The efforts of Saudi Arabia towards the goals of sustainable development, Corona pandemic (Covid-19) and the achievement of sustainable development.

Spatial limits: A review of the educational administration's efforts in different countries, such as Finland, Japan, England, Northern Ireland and Saudi Arabia, to achieve sustainable development in public education.

Temporal limits: The research was conducted during the academic year 2021/2022.

Definition of Terms

Educational Administration: The procedures adopted by the society to regulate the educational process in the institutions (Amayreh, 2015). It is procedurally defined as some processes that integrate with each other to achieve the goals of education. It is also a part of the public administration and is headed by the director of education, where the education policy is consistent with the general policy.

Coronavirus (Covid-12): It is one of Coronaviruses. World Health Organization classifies it as a pandemic due to its rapid spread. It emerged in Wuhan, China at the end of 2016. Its symptoms are known and can be transmitted to humans (WHO, 2020).

Sustainable Development: One's ability to constantly develop the educational, political, economic, technological and informative aspects of his/her life in a way that helps develop himself/herself and his/her society and keep pace with the age and its changes (Zayed, 2017). It is procedurally defined as a method of thinking about the future where the community, environmental, economic and educational aspects and dimensions are balanced to improve the quality of life.

Education for Sustainable Development: An educational process and approach based on the fundamentals of sustainability. It is not some approved ideas that teachers can simply apply in education because sustainability has different concepts as well as curricula and topics differ

according to the local contexts and priorities (Combes, 2009). It is procedurally defined as lifelong learning that aims to acquire values, knowledge and skills that help identify the various aspects on which sustainability is based in terms of the economic, social and environmental aspects to achieve some goals of education for the development and improvement of performance in managing the educational process.

Method

This research discusses the role of educational administration in achieving sustainable development in public education in Saudi Arabia during COVID-19 pandemic and the relevant issues. The data were collected to fulfill the results, draw conclusion and present suggestions for developing the role of educational administration in achieving sustainable education during COVID-19 pandemic. The author adopted the qualitative approach that addresses verbal rather than numerical data. As a research strategy, it is inductive, constructionist, and interpretive (Bryman, 2008).

2 Theoretical Frameworks

2.1 Objectives of education for sustainable development (ESD)

Education for sustainable development attempts to better equip individuals, institutions, and communities to deal with the complex and interrelated social, economic, and environmental difficulties they will confront in their personal and professional life (Australian Government, 2007).

UNESCO (2013) also asserted the following goals of education for sustainable development:

- Creating interaction among education, community awareness and training with a vision to create a more sustainable future.
- Providing citizens with the knowledge, skills, perspectives, and values necessary to form a sustainable community

Kopnina and Meijers (2014) report that education for sustainability is the education that aims to achieve all forms of sustainable development, such as:

Human sustainability: Preservation of human capital, i.e. health, education and knowledge.

Social sustainability: Preservation of social capital (institutions and networks).

Economic sustainability: Capital preservation.

Natural (environmental) sustainability: Protection of natural capital (water, land, air and minerals).

If education for sustainable development is applied in an integrated manner, knowledge, values and skills fundamental for the decisions, which raises the standard of living both locally and worldwide, will be promoted. It is a means of transferring knowledge, creating values, developing the human and personal capabilities to choose sustainable alternatives.

2.2 Fundamentals of education for sustainable development

Education for sustainable development is based on several fundamentals identified by UNESCO (2009), as follows:

- a. Protection of the environment.
- b. Natural resource conservation and sustainable use.
- c. Addressing unsustainable production and consumption patterns.
- d. Establishing fair and peaceful communities.
- e. Supporting sustainability of life, democracy and human prosperity.

The Australian government (2009) defined some principles of Education for sustainable development in its plan for implementing sustainable development in education, as follows:

1. Transformation and change: Education for sustainable development provides the information, skills, ability and motivation that help the persons plan and manage change towards sustainable development within the institution and community.
2. Education for all and life: Education for sustainability encompasses a comprehensive knowledge of teaching and learning for people of all ages and backgrounds at all stages of life, in all learning systems, formal and informal, at schools, work, and at home.
3. Thinking of Systems: Education for sustainability prepares people to grasp the connections between many environmental, political, social, and economic systems.
4. A better vision for the future: Education for sustainable development connects persons through shaping a common vision of sustainable future.
5. Critical Thinking: Education for sustainable development enhances the persons and groups' ability to reflect on personal experiences and global views.
6. Participation: Education for sustainable development encourages the persons and groups' participation in sustainable development.
7. Partnership for change: Using partnerships to create networks and ties between different community sectors.

Accordingly, education for sustainable development is not only restricted to environmental protection and natural resource conservation, but it is also based on some principles that can achieve well-being for human and the community.

2.3 Aspects of education for sustainable development

Sustainability of education

Sustainable schools incorporate education for sustainable development into their curriculum, according to a new idea called education for sustainable development (Warne, 2014). It is viewed as proactive and revolutionary, necessitating a shift away from traditional teacher-led education that is focused mainly on textbooks (Moore, et al. 2019).

The United Nations' Education for Sustainable Development Program is a sort of education that encourages community members to alter their knowledge, skills, beliefs, and behaviors in order to achieve a more just and sustainable society. Through a balanced approach to sustainable development, the program aspires to empower present and future generations to meet their requirements (McKeown et al, 2002).

Education for sustainable development provides several sustainable school features that create many positive benefits for students, including improving opportunities for student participation in decision-making and providing opportunities that help improve the school environment and increase student productivity and achievement. Sustainable schools aim to raise awareness of environmental issues among students, teachers and their parents and get them to deal with environmental issues seriously while promoting concepts of protecting and preserving society from all potential risks to save money on maintenance and renovation (Reed, et al, 2014).

To confirm this importance, UNESCO objectives have been emphasized in achieving sustainable development stating that this principle should be strengthened. "Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Goal 7: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable; Goal 17: Strengthen and revive the global partnership for sustainable development's mechanisms of implementation".

2.4 Dimensions of education for sustainable development

According to Aleixo et al. (2016), sustainable development consists of the following three dimensions:

1. Environmental dimension: The community's impact on natural resources and ecosystems, i.e., one's impact on the environment and its consequences for future generations.
2. Economic dimension: The system's economic viability in meeting economic needs, which includes economic growth and equality, both of which must be addressed in the long run.
3. Social dimension: The need for justice based on cohesion, which results in changes in the economic policy, i.e. the goal is to fulfill ones' needs to work for food, health and energy.

Sustainable development education aims to change people's behavior and educate them sustainable life models in order

to achieve sustainable development in its economic, environmental, and social dimensions. According to the European Economic Commission, sustainable development involves environmental, social and cultural dimensions ((Boldermo et al., 2019; Siraj-Blatchford, 2016; Somerville et al., 2015). The environmental dimension is the major one (Davis et al., 2014), while the economic one is the least influential (Sadownik, 2017) due to the level of socio-economic well-being. Moreover, sustainable development is a connection between social, environmental and economic dimensions of human capacity.

Environmental dimension: sustainable development seeks to achieve some environmental goals, including rationalizing the use of natural resources to provide a healthy environment for future generations. Heggen et al. (2019) propose implementing educational activities in agriculture to reinforce the role of youth as environmental citizens interacting with the environment. This can also be achieved by defining the extent of the school's use of the recycled materials, establishing a clear policy regarding waste recycling, implementation of energy-saving activities and encouraging students to care about nature. In the Kingdom of Saudi Arabia, education is a critical component of sustainable development. It is concerned with including environmental concerns as a component of sustainable development (Al-Shaabi, 2018).

Economic dimension: It consists of three partially overlapping concepts (economy, consumption, and value), which will naturally differ from one country to the next and within a single country depending on the economic status of the families (Grindheim et al., 2019). In these circumstances, the educational goals are to teach children about monetary worth by allowing them to participate in the actual purchase and to teach them that they must make financial decisions, especially when money is little. The concept of "consumption" poses a threat to economic sustainable development due to pollution and over-exploitation of natural resources. The educational methods that address consumption are savings, participation, reuse, and recycling. The concept of "value" can be activated by allowing children to experience how much effort is required to create a product (Siraj-Blatchford et al., 2016).

Social sustainability: McKenzie (2004) defined social sustainability as "positive life-promoting practices within communities (p. 12)". In education, this can be applied by being in the spirit of the school that considers gender equality and that students can find solutions to the problems of the community and the opportunity for participation in decision-making as well as facilitating the different social relations (parents, children- parents, and parents- parents, and educational staff) that emerge in the activities they do. This field is concerned with the social level and living conditions by taking care of human beings, developing their capabilities, improving their standard of living, and achieving justice among them. It includes indicators of social equality, achieving a fair distribution of wealth, combating poverty, and unemployment rates versus

population growth that measure it. The indicators of the percentage of the population below the poverty line and the rate of disparity between the high and low classes in the community were selected to evaluate the extent of achieving social justice (Saleh, 2018).

Some interconnected dimensions of sustainable development affect each other. This does not mean that education for sustainable development must address all previous dimensions at the same time, but may focus on only one or two dimensions without causing a conflict with the other dimensions (Grindheim et al., 2019). The aspects of achieving sustainability at schools are assessed through their previous dimensions where schools can involve sustainable learning and education in several aspects, including curriculum, knowledge, skills and values that promote the principles of sustainability and the administration practices which reflect the concept of sustainability. The school should also adopt sustainable development as an important part of its policy as well as activate special events on sustainable development to spread and promote this concept.

2.5 Role of educational administration in achieving sustainable development of education

According to UNESCO (2013), schools can adopt sustainable development and contribute to sustainable learning and education if the curricula include information and skills that reinforce sustainability of the student and school management practices, the practices reflect the concept of sustainable development, the student participates in decision-making that affects school life, and the school activates special events for sustainable development.

Ahmed (2003) defines the characteristics that help the educational administration support the process of sustainable development, as follows:

- Purposeful management: It does not depend on randomness, confusion, or chance in achieving its goals, but it adopts objectivity and proper planning within the framework of the public interest.
- Positive management: It does not depend on negatives or rigid positions, but it has a leading role in the areas of work.
- Collective management: It avoids tyranny and authoritarianism and considers advice and public interest through hard work that involves cooperation and familiarity.
- Human administration: It is not biased towards certain intellectual or educational opinions or doctrines that may offend educational science. However, it involves flexibility and is keen to achieve its goals without negligence or exaggeration.
- Social administration: It occurs in a social environment to serve the students who represent the foundation of the community renaissance.
- Technological management: It includes some scientific knowledge and organized methods that

are applied to remove the scientific obstacles in the field of management.

Sustainable development of education is a process that comprises some intertwined processes, including goal setting, planning, organization, coordination, implementation, monitoring, follow-up, supervision, direction and decision-making process, which is the fundamental of management. Moreover, it is directed towards achieving specific goals, depends on human and financial resources, and seeks to use these resources effectively. Achieving the goals requires organizing and directing the efforts of manpower by other individuals. Sustainable development of education does not occur in a vacuum, but in a physical and social environment. Accordingly, management involves interaction between the members of the community, culture, economic capabilities as well as political, social and cultural circumstances (Al-Anzi, 2020).

It also requires a successful school administration that can overcome all obstacles, provide an environment appropriate for the educational process as well as the material and human capabilities that help the school implement its mission, establish good human relations among the school's staff, and create a good example for students (Al-Wathyani, 2011). Education administrations play a prominent role in adopting sustainability. This requires providing adequate support and necessary resources, supporting and empowering cooperative administrators who participate in the transformation process towards sustainability, and regular review and follow-up by the university administrations for the progress that has been achieved in this area (Togo & Lotz-Sisitka, 2013).

The role of educational administrations is essential in the transformation towards sustainable development, which requires their contribution in connecting research, curricula and facilities of the university with the administrative practices that lead to this transformation by integrating sustainability in all administrative and educational processes (Ralph & Stubbs, 2014). In addition, education departments must accept and institutionalize the concept of sustainable development, as well as promote and spread its best practices in the academic and local communities by adapting and linking administrative processes and facilities to sustainability to enable the educational institutions and the community to adopt sustainable development (Berchin et al., 2017).

2.6 Efforts of educational Administration in various countries to achieve sustainable development in public education

Finland has had remarkable success in activating education for sustainable development (ESD) Due to the high quality of its schools, instructors, and educational research. The implementation of ESD in daily practice is a concern for schools. The Regional Centre of Excellence in ESD and the Finnish National Board of Education also contribute

significantly to these efforts. The importance of an eco-social approach to education, systems thinking, and value-based education has also been emphasized (Åhlberg et al., 2015).

The Finnish Ministry of Education has taken many measures to make schools more sustainable and environmentally friendly. For example, it included sustainable development in the topics of the curriculum, allowed addressing environmental issues in lessons, devoted various elective courses to sustainable development, as well as participation in projects and joining the environmental networks that reinforce cooperation with local environmental experts, organizations and companies, provided numerous opportunities for developing education through partnership and changing daily practices, and highlighted considering the environmental aspect when planning for procurement through cooperation between schools and local authorities (Loukola, 2011).

Many countries attempt to integrate SDG into their school curriculum. For instance, the Japanese government is implementing a new curriculum to produce human resources that contribute to a sustainable society (MEXT, 2019). This is the first time the Japanese government has included human resources in the curriculum of its schools. The uncertainty of quantifying education efforts, according to Kioupi and Volvuli (2020), is a problem when it comes to implementing the SDGs. They proposed a framework to help solve the problem. Before the government's new curriculum is implemented in Japan, just a few senior high schools have already offered SDGs integrated courses. For example, Fredriksson et al. (2020) claimed that international collaboration is an aspect of Japanese SDGs education. Two UNESCO Associated Schools financed by the Japanese Ministry of Education were the focus of their case study.

In the last 20 years, Sweden has conducted considerable and rising research on the implementation of education for sustainable development in education. ESD strives to encourage young people to take an active role in creating more sustainable communities.

Furthermore, it is intended to encourage participation in actual and relevant social issues (Barrineau et al., 2019). Transformative ESD refers to changing education based on students' initiative and their relationship to the surrounding society. Lotz-Sisitka et al. (2015) demonstrated several alternatives that enable education to become transformative. The ultimate goal is to support students' and instructors' development so that they can adapt flexibly to the needs of the community and the educational process (Togo & Lotz-Sisitka, 2013).

Among its goals for 2020, the British government included transforming all schools into sustainable ones by 2020. To achieve this goal, the Government Office in London issued a guide to sustainable schools that included many sustainable case studies, examples and activities at schools. It showed how to include sustainable development as a

major element of the school through the dimensions of energy, water, food, waste, buildings, schoolyard, transportation, traffic and community well-being that are approved by the Department of Children, Schools and Families Affairs. Moreover, it revealed that sustainable schools are applicable, but face diverse challenges. It also demonstrated the multiple benefits that students and schools get from these activities and initiatives, such as increased self-esteem, increased academic achievement, cost savings and increased community participation (Government Office for London, 2007).

Good teaching, improved student outcomes, and a relationship to the professional standards and qualifications of teachers who are part of the innovative communities and networks of ESD practice characterize sustainable education in the United Kingdom. Nonetheless, ESD progress is still on a modest scale, with most projects predicated on fixed time and resource constraints. As a result, good practice adoption in all industries is inconsistent across the UK.

In England and Northern Ireland, the lack of legislative emphasis on sustainable development has hampered the widespread implementation of ESD best practices. The Welsh Government has placed a strong emphasis on sustainable development, despite the fact that ESD (ESDGC) has lost its significance in national policy. In Scotland, a more integrated and cohesive approach to sustainable development and ESD is being emphasized. Furthermore, policymakers and practitioners have endorsed education as a key driver in the transition to a more sustainable society (UNESCO, 2013).

Accordingly, foundations of sustainability initiatives success can be deduced from the clarity of the goal, as the education administrations in the selected countries defined a goal of transformation to sustainability; intensified training for all members of the school community targeted by the initiative, including leaders, teachers, students and parents; and focused on the daily practices at the school and attempted to change them to be more sustainable gradually.

2.7 Efforts of the Kingdom of Saudi Arabia towards the sustainable development goals

Sustainable development has been of great importance in Saudi Arabia since the beginning of its development path and its features have become clear in its long-term strategic directions. Its implementation began in the successive five-year development plans launched in 1970, which sought to develop the citizens' capabilities, achieve their ambitions, fulfill their needs, improve their standard of living, and expand the scope of development to include all economic and social sectors in all regions. In implementing its development strategy, the Kingdom adopted Islamic principles and values as well as economic freedom to include the economic, social and environmental dimensions of development. (Towards a sustainable development for the Kingdom of Saudi Arabia, the first national voluntary review, 2018).

Since the official launch of the seventeen sustainable development goals, which achieved the 2030 Agenda for Sustainable Development, Saudi Arabia has been keen to build national frameworks to achieve them. The fourth goal was included in the strategy of the Saudi Ministry of Education, the initiatives and projects. The most prominent efforts of the Ministry of Education in implementing the fourth goal of the sustainable development goals are, as follows:

Formation of a National Committee: It follows the implementation of the fourth goal in the sustainable development plan. It also aims to lead efforts, develop plans and implement initiatives related to the fourth goal, and support the competent authorities in implementing the other goals of the sustainable development plan.

Governance system: Building a modern system of governance and policies, including developing a unified system for education, universities, and training strategy.

Building a strategy for education and training in Saudi Arabia whose vision is a learner who unleashes his/her full potentials as well as participates in the development of the community and the country through a high-quality and globally competitive educational system.

Initiatives: Launching several initiatives in light of Saudi Arabia vision 2030 to achieve the fourth goal of sustainable development goals.

In addition, establishing virtual schools that ensure a safe educational environment for the students' studying in conflict zones in the southern border to ensure the sustainable development and availability of education. Moreover, the Saudi Ministry of Education cooperates with the General Investment Authority to recruit students. Further, the ministry has trained students to personal and professional skills that increase their employment opportunities in the labor market. 500,000 students have been trained in this initiative (Alshuwaikhat et al., 2016). Furthermore, it has undertaken several initiatives that promote students' citizenship, intellectual security, non-violence, excellence through scientific and research competitions, participation in the Globe Environmental Program.

Al-Brahim (2014) stated that Saudi efforts to achieve sustainable development of education are, as follows:

1. Increasing external scholarships; establishing universities, such as King Abdullah University of Science and Technology and King Abdullah Project for General Education Development (Tatweer); and maximizing the budget devoted to public education.
2. The Kingdom's membership in the World Trade Organization, establishing economic cities, encouraging foreign investment, adopting a strategy that addresses poverty in the Kingdom, the Kingdom's keenness not to deplete natural resources for the sake of future generations, and adopting a conservative financial investment policy.

3. Issuing legislations and laws that protect and develop wildlife and spreading environmental awareness among citizens.
4. Establishing national institutions for national dialogue and human rights, expanding the scope of intellectual and academic freedom, maximizing job opportunities for Saudi women, supporting the establishment of civil society institutions and protecting cultural heritage.

The Saudi Ministry of Education continues to strive for greater accomplishments in the field of sustainable development as part of the Kingdom's Vision 2030, and to collaborate with Arab, Islamic, and friendly countries to unify efforts and achieve global patriotism in conformity with the Sustainable Development Plan's goals (Towards a sustainable development for the Kingdom of Saudi Arabia, the first national voluntary review 2018).

2.8 Corona (COVID-19) pandemic and achieving sustainable development

In the light of a widespread and severe health threat at the global and Arab levels, concern has been given to combat the virus and save nations rather than achieve sustainable development. It has severely affected the lives and livelihoods of humans from all social and economic backgrounds. This situation is considered an emergency at the regional and international levels, so there must be urgent action, whether at the regional or the international level (Al-Talafha, 2020). Accordingly, the major problem facing the Arab countries is identifying the negative impact of the novel coronavirus (Covid-19) on achieving goals of sustainable development.

In the medium and long terms, goals of sustainable development focus on the six methods that remove the effects of the Coronavirus pandemic. Despite the huge wealth of the world, the ingenuity of science and technology, the supposed willingness for disasters and crises, the frequent warnings of pandemics harms, including Coronavirus, the world was unwilling for it (Al-Talafha, 2020).

The Six Transformations of the SDGs provide a detailed framework for building integrated strategies that help recover from COVID-19 and address the negotiations, priorities and synergies between the SDGs. The core of the Six Transformations is the recognition that all 17 SDGs are achievable. Through six major community transformations are, as follows: education and skills, health and well-being, clean energy and industry, digital technology, sustainable cities as well as sustainable use of land and agricultural spaces. The six transformations also provide an agenda for ministries, companies and civil society organizations. For example, they help the governments, the international community, business sector and civil society develop implementable strategies that achieve sustainable development goals. Thus, our communities become more prosperous, inclusive and sustainable. Because of this

pandemic, governments will have to actively increase their institutional capacities in all sectors to achieve the optimal performance in the coming years to mitigate the effects of performance levels (UNESCO, 2020; Al-Talafha, 2020). the health and economic crisis (UNDP, 2018).

The Kingdom's leadership has shown its ability to manage the crisis of the novel Coronavirus through some precautionary decisions that prevent its causes and restrict its spread. These efforts showed investing the great capabilities provided by the state in every sector, its ability to overcome the crisis represented by the Ministry of Health and drawing possible scenarios for its risks. Accordingly, educational institutions and administrations, universities, and the general institution for technical and vocational training have provided all human and technical capabilities that help the Committee concerned with the virus carry out its role competently.

3 Results and Discussion

With the increasing global interest in the transformation towards sustainable development in all sectors during the past years, Saudi Arabia has paid great attention to sustainable development in its vision 2030, focusing on the environmental, financial, infrastructure, and social dimensions. Education for sustainable development in Saudi Arabia represents the foundation of sustainable development, human development and capital (Al-Anzi, 2021). Moreover, it means building a sustainable future for the present and future generations and providing them successful lives. Furthermore, through its interdisciplinary and comprehensive approach to learning, it creates resilient communities and supports a long-term perspective in decision-making processes, critical thinking, and creativity in solving problems. Hence, it reduces disasters risks, such as the COVID-19 pandemic, which retains the quality and importance of education for sustainable practices (Al-Talafha, 2020).

Fundamentals of quality public education involve education for proper interaction with the knowledge community, sustainability of lifelong education, participation in achieving development, assimilating scientific and technical culture, achieving citizenship and human rights, increasing productivity of learners and improving their performance, achieving quality of the educational product, increasing in the educational competence of teachers, connecting the educational process with the needs of the labor market and upgrading the level of the administrators in the educational institution.

Despite the high expenditure on human resource development in the Kingdom of Saudi Arabia, it has not achieved the desired goals that would accelerate the transformation to a knowledge economy. Currently, the major problem facing the Arab countries at the current stage is to identify the negative impact of the novel Coronavirus (COVID-19) on the ability to achieve sustainable development goals. Development and building capacities contribute to the implementation these goals. Sustainable development will not be achieved without a full understanding of its goals and the identification of the substantial mechanisms, which requires building human and

Education for sustainable development is a new form of education and learning in that it encourages high-quality education for all people that is founded on the values, ideas, and practices that are necessary for effectively facing current and future issues. It is also founded on respect for values, lifelong learning, a commitment to high-quality education, and the use of participatory teaching and learning methods that stimulate behavioral changes and provide the community with components of sustainable development. According to Al-Khawaldeh (2016), it is substantial to redefine the concept of sustainable development according to the reality of the Islamic countries adopting this approach of development. Sound and flexible institutional arrangements represent the foundation of the process of implementing the goals of sustainable development by ensuring multiple levels of government, reinforcing participation and accountability, and building human and institutional capacities.

According to Al-Talafha (2020) and Ramos et al. (2018), the pandemic is a global concern and a topic that is regularly addressed in the present proposals of development institutions. Although it has significant ramifications on the worldwide level, its repercussions and future outcomes have not been fully defined yet. State-funded instruction sustainable development refers to coordinated development and involves a few angles related to the environmental surroundings, economics, culture, gender equity, and duty concerning the local area. Balance has to be achieved between them. The notion of sustainable public education development is inclusive and encompasses.

Environmental dimension uses distance learning to help equity in promising circumstances, reasonable dissemination of resources, and complementarity between the fields of sustainable development. However, the previous literature showed that the schools' environmental health policies have been weakened. This is connected with the neighboring environment and social issues. This issues can be faced by developing preventive and awareness-raising projects against epidemics and illnesses as well as reexamine and coordinate the SD goals, targets and demonstrative procedures to execute and monitor this update in the foundation practices (Heggen et al, 2019; Sadownik, 2017).

In terms of the social dimension, unintended results are to be considered to discover and moderate approaches by guaranteeing education continuity and supporting children's resilience and decreasing tension during emergencies. The outcomes of document analysis are promising; for example, schools and local authorities have to work together to rapidly adjust to the new circumstance and guarantee education sustainability, dynamic instructors have to be considered as reference figures or specialists among their associates to develop learning networks. It has been noticed

that developing plans to defy school closure can be accomplished through planning education activities as rapid response activities with long-term humanitarian goals (Besong and Holland ,2015; Aleixo et al., 2016).

As for the efforts of educational administration in various countries to develop sustainable development in public education, it is assured by (Åhlberg et al., 2015; MEXT, 2019; Togo & Lotz-Sisitka, 2013; Fredriksson et al., 2020; Barrineau et al., 2019) that several countries, such as Finland, Japan, and the United Kingdom, attempt to integrate goals of sustainable development into school curricula. Other countries, such as Japan, Finland, and Sweden, focus on measuring learning outcomes through improving the practices of teachers and developing them professionally. They also seek to strengthen the relationship between students and the local community as well as support educational research.

4 Suggestions for developing the role of educational administration in achieving sustainable education during COVID-19 pandemic

Through analyzing many related documents, such as Bush et al. (2019), United Nations (UN) report: The 2030 Agenda for Sustainable Development, UNESCO: How to continue education for sustainable development during the pandemic (2020), UNESCO: Protecting students' right of education during COVID-19 (2020), Uygur et al. (2020) and Wolff (2020); the study would provide suggestions based on the most appropriate and achievable points, as follows:

1. Designing educational content and updating its quality standards and techniques to be utilized as positive practices that sustainably accelerate the process of progress.
2. Improving social dimension using the new portals, stages and options that have been dispatched by countries during the pandemic.
3. Actions should be taken by private sector donors, philanthropists, and international financial institutions to provide finance, guarantee quality education as well as support sustainable activities and needs.
4. Defining sustainable education objectives and processes during and after the pandemic.
5. Benefiting from the global indicators and systems related to sustainable development.
6. Preparing a relevant strategic plan for the transition towards sustainable development as well as sustainability policy for the management of public education.
7. Integrating sustainable development in all administrative and educational processes.
8. Building human and institutional capacities in all sectors to achieve the optimal levels of performance according to the present changes.

9. Urgent policy actions should be taken to mitigate the pandemic repercussions and be based on a comprehensive approach that helps achieve the goals of sustainable development, especially in the field of education.

10. Benefiting from sustainable development in developing administrative practices to achieve the present and future requirements of institutions, especially the educational ones.

5 Limitations

The present research addressed the role of educational administration in achieving sustainable development in public education during the outbreak of Coronavirus (COVID-19). The major limit was the author's adoption of the qualitative research design. The author did not discuss the data and the results statistically in order not to change the data to numbers such as the quantitative research. The results were obtained through observation and events analysis. Moreover, few studies addressed sustainable development of public education in Saudi Arabia. More importantly, few local and Arab studies investigated the role of educational administrations in adopting sustainable development.

6 Conclusions

Because of its significant significance in shaping people's behavior and habits, most countries have looked into how to implement education for sustainable development in their diverse educational systems. Sustainable educational development is a critical prerequisite for educational institutions. After sustainable development, education has played a vital role in Saudi Arabia. The implementation of this dimension began with the Kingdom's five-year development plans, which aimed to develop citizens' capabilities, accomplish their ambitions, meet their needs, and improve their standard of life, which is the Kingdom's main goal of sustainable development.

Saudi Arabia has been eager to construct national frameworks to accomplish the seventeen sustainable development objectives that resulted from the official launch of the 2030 Agenda for Sustainable Development. The Saudi Ministry of Education's policy incorporated the fourth aim of the Sustainable Development Goals. Currently, the Arab countries' biggest challenge is determining the harmful impact of the new Coronavirus (COVID-19) on their ability to meet sustainable development goals. Despite the huge wealth of the world, the ingenuity of science and technology, the supposed willingness for disasters and crises, and the frequent warnings of pandemics harms, including Coronavirus; the world was unwilling for it.

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