

## The role of Jordanian school principals in achieving the fourth goal of the sustainable development goals

Rawan kheder Yousef Abu shaqra 1, Department of Fundamentals and Educational Administration, Faculty of Educational Sciences, The Hashemite University, Zarqa, Jordan

### Suggested Citation:

Abu shaqra, R. K. Y (2021). The role of Jordanian school principals in achieving the fourth goal of the sustainable development goals. *Cypriot Journal of Educational Science*. 16(1), 167-186.

<https://doi.org/10.18844/cjes.v16i1.5518>

Received from November 21, 2020; revised from December 20, 2020; accepted from February 05, 2021. Selection and peer review under responsibility of Prof. Dr. Huseyin Uzunboylu, Higher Education Planning, Supervision, Accreditation and Coordination Board, Cyprus.

©2021 Birlesik Dunya Yenilik Arastırma ve Yayıncılık Merkezi. All rights reserved.

### Abstract

This study aimed to detect the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals. The study population comprised of all the (3865) basic school male and female principals in the first semester of the academic year 2020/2021. The randomly selected sample consisted of (378) principals. The researcher adopted a descriptive survey approach and built a questionnaire consisting of (36) items based on the UN indicators of the fourth goal of sustainable development goals. The study came out with several main results, some of which were the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals came at a moderate degree and that there are statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the respondents' estimates. It also indicates that there are statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the averages of the respondents' estimates of the overall score of the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals attributed to the difference in the gender variable (males). Considering the results, the study recommended holding periodic courses to promote principals' awareness of the requirements of employing the fourth concept of sustainable development and to ensure its further activation in Jordanian schools.

Keywords: Fourth goal, sustainable development, Principals

\* ADDRESS OF CORRESPONDENCE: Rawan kheder Yousef Abu shaqra, Department of Fundamentals and Educational Administration, Faculty of Educational Sciences, The Hashemite University, Zarqa, P.O. Box 330127, Postal Code 13153, Jordan

Email Address: [roro\\_rose\\_2009@yahoo.com](mailto:roro_rose_2009@yahoo.com) [Rawank@hu.edu.jo](mailto:Rawank@hu.edu.jo)

## 1.Introduction

Education is one of the essential priorities of the world's development agenda. At a social and personal level, all people appreciate education, give it value, and seeks to attain it. Jordan is one of those countries that has made great efforts to spread education in all its regions and among its citizens regardless of their age because education is one of the biggest long-term human investment that the state and families invest in by sending their children to school instead of sending them to the labor market. The education sector is one of the most important sectors of society, and all governments pay particular attention to this sector, as it represents a real investment in the prosperity of the future of the people, enlightens souls, gives people strength and resilience, achieves economic and social welfare, and leads to development. Likewise, the issue of development in the developing world is the main issue for its peoples, and the overriding concern of its intellectuals, and specialized scholars because it is of great importance in raising the efficiency of community members and developing their capabilities especially in our developing societies that seek to catch up with the technological revolution, which took many forms. , And vast dimensions beyond imagination. (Sheikho, 2015). The world is witnessing many changes and developments in various technological and knowledge fields that would affect societies, and these developments included human resources, which are considered one of the most essential elements for achieving sustainable development, and therefore all development and economic policies are based on the optimal investment of the human element. Education significantly contributes to the sustainable development of individuals, therefore, when states establish their vision and plan, it focuses on the continuous modernization of their educational systems, the increase, and expansion of its educational institutions, developing their curriculum to be in line with the global changes, and achieving comprehensive development (Hassan,2020).

Domestically, Jordan was able to achieve remarkable progress in increasing access to free education for the basic stage (1st-10th grade) that is among the compulsory education, in addition to the secondary education that is divided into two educational systems: academic and vocational. Public education in Jordan provides equal opportunity to access education for everyone, male, female, and illiterate people by enabling them to enroll in schools to increase the percentage of educated people in Jordan. Jordan is among the countries that are interested in preparing an educated workforce and it is among the highest Arab and international countries in the number of educated people that constitutes 98% of the young who master basic educational skills of writing and reading (Rajab, 2017).

The concept of sustainable development emerged in 1972 at the Stockholm Conference in Sweden, which was organized in cooperation with the United Nations. It focuses in its basic principles on the human environment, which is considered a global and essential step to take care of the environmental aspect, and it has addressed several environmental issues including the issues of poverty and the absence of development in the world. This agreement resulted in an emphasis on the necessity of the role of education in reorienting society towards sustainable development, and (Lotz-2013) emphasized the need to achieve integration and balance between all social, environmental, and economic development goals. It also stressed the importance of culture as it has a strong impact on how to deal with issues of sustainable development, and the way in which education can achieve the sustainable development goals (Okour, 2013). The role of education is to achieve integration between aspects of comprehensive development and interaction with all segments of society and to employ education to achieve development goals. Hence the importance of education and instilling values for all age groups, which in turn work to achieve sustainable development as well as enable students to understand their environment and achieve harmony (Ben Arabeya, 2018).

The Jordanian Higher Education Law of 1994 indicated many goals that achieve what the principles of comprehensive development aspire to. It included the necessity to understand all concepts related to the natural, geographic, and demographic environment, stressed the need for a deep understanding of the multiple and varied elements of heritage, the need to preserve the Arabic language and its use in communicating with others, and to Open to multiple human cultures. It also stressed learning and utilizing technology appropriately, understanding the systems and the different

mathematical relationships to create a mathematical thought that benefits the person in all fields, and then realizes all the different concepts, facts, and theories through which one can explain all Cosmic phenomena, finding solutions to problems, and striving for human happiness. The Jordanian Higher Education also stressed that dealing with all information flexibly and easily should be easy, as well as the need to focus on a deep understanding of the human personality, and to work on forming social behavioral rules capable of achieving interaction in dealing with society and the local environment. Hence, the sustainable development plan of 2030 added a new goal, which was adopted by the member states of the United Nations in New York through its conference on sustainable development. The plan includes 17 goals, including a new global goal, and it may be considered the first of its kind. It is the fourth goal of the sustainable development goals which stipulates that " ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." It includes seven goals and three means of implementation. This goal has been established through an intensive consultative result conducted by all participating member states through broad participation with local community institutions, the private sector, regional organizations, and international scientific research institutes. From the aforementioned, we can conclude that this goal ensures the quality, comprehensive, complete, and equitable education for all members of society and to promote lifelong learning opportunities (UNESCO, 2020). Hence, the study came to pinpoint the reality of public education sector in Jordan considering the fourth goal of sustainable development from the primary school principals' viewpoint and to ensure the extent to which basic schools implement this goal.

UNESCO (2014) emphasized that sustainable development can be achieved when we change the way we think and work as well as the good utilization of technical solutions, political systems, and financial instruments. This undoubtedly requires the provision of quality education and learning for sustainable development at all levels. The goal of education for sustainable development is to enable individuals to confront current and future global challenges constructively and creatively and to create more sustainable and easy-to-adapt societies.

Pota (2017) argues that education seeks to preserve human capital by providing communities and future generations with the skills and information they need and by enhancing them culturally and intellectually to make them productive, involved, and committed to their societies. He also stressed that education is one of the most important pillars of sustainable development, and that it is a stable foundation on which sustainable development is centered, and that the world can not achieve its goals and other objectives if the level of education remains low, and that it promotes the realization of other rights, whether economic, cultural, or social. All previous transformations and developments require a high-quality educational system available to the largest possible number of the population, capable of moving with its members from intellectual closed-mindedness to benefit from different cultures, and from individualism to group work and community participation, and from poverty and unemployment to searching for suitable job opportunities, and from Faint health and environmental pollution to health and wellness and a clean environment (Ammar and Youssef, 2006). Based on the foregoing, education is one of the most key elements of supporting sustainable development, because its prominent impact is to achieve the goals of society and elevating it to the highest levels of excellence. The competent human resources in education sectors also play a central role in developing knowledge and using it in community service to improve the skills of its members to keep pace with the challenges and the future expectations (Ben Arabeya, 2018).

It noteworthy that, all public, private, basic, and secondary schools in Jordan fall under the umbrella of the Ministry of Education, except the undergraduate and postgraduate stages. The education system in Jordan, as indicated under the Higher Education Law of 1996 included these stages:

1. Kindergarten stage: This stage of pre-school education aims to provide an appropriate environment that prepares the child for a balanced education that includes the personal, physical, mental, spiritual, and emotional aspects to help him to maintain healthy habits, develop social relations, promote positive trends and love for school life. The Ministry of education establishes

kindergartens within the limits of its capabilities according to a phased plan. The technical and administrative affairs of kindergartens according to instructions issued by the Minister.

2.The Basic stage: children from 6-16 years old fall under this stage, starting from the first grade until the tenth grade. The educational strategy for this stage aims to build national unity, develop capabilities, preferences, and guide students' learning. This stage is compulsory and free of charge in public schools. This stage aims to achieve the public goals of education and to prepare the citizen physically, intellectually, spiritually, emotionally, and socially and to be able to:

- To be aware of the history and principles of Islam, its rituals, rulings, and values, and is represented by morals and behavior.
- To master the basic skills of the Arabic language so that he could use them easily and accessibly.
- To know the basic facts related to the Jordanian, Arab, and international environment, nature, and geography.
- To adhere to the rules of social behavior and considers the traditions, customs, and good values of his society.
- To love his country, be proud of it, and bears his responsibilities.
- To love his family and society and bears his responsibilities towards them.
- To fluently master the basic skills of at least one foreign language
- To deal with numerous systems, basic processes, and geometric shapes and uses them in life.
- To understand the basic scientific facts and generalizations and their experimental foundations and implement them in the interpretation of real phenomena.
- To be able to maintain his safety, cleanliness, beauty, and wealth of his home.
- To realize the importance of being physically fit and healthy and exercises the right activities for his life.
- To have a taste of the current aspects in the different arts and expresses his artistic tendencies.
- To be able to perform professional skills commensurate with his abilities and inclinations, and seeks to develop them, and promotes in himself respect for manual work, considering that work is an essential function in life.
- To obtain the values of hard work, perseverance, and self-reliance in achieving self-ability, earning a living, and self-sufficiency
- To express his talents, special abilities, and creative aspects.
- To accept himself respects others considers their feelings and appreciates their merits and achievements.
- To appreciate the value of time and improves its investment and free time.

To develop himself and strive for self-learning and increasing his efficiency.

3.Secondary stage: In this stage student focuses on choosing the category he desires, as it is divided into two tracks: the comprehensive secondary education track, which is based on a common cultural base and a specialized culture. The second track focuses on the applied secondary education that is based on vocational training. A student here chooses the track according to his abilities and preference. It is based on providing specialized cultural, scientific, and professional experiences that meet the needs of the Jordanian society and help the student to pursue higher education. This stage aims to build a good citizen who can use the Arabic language to enhance his ability to Communication and Communication. It also aims to:

- To be a citizen who can adapt to the environmental changes of his homeland and its natural and demographic dimensions.
- To be a citizen who can be a cultural subject derived from the civilization of his nation in the past and present and realizes the need for a conscious openness to global civilization.
- To interact with the surrounding cultural environment of his community

- To Realize the importance of the family and its cohesion
- To enhance his self-confidence and appreciation for the humanity of mankind and his respect for the dignity and freedoms of others
- To strive for the progress, advancement, and pride of his homeland, and keenness to participate in solving its problems.

In 2020, Taşçı and Titrek conducted a study that aimed to examine the lifelong learning provided in higher education, the implemented strategies, the experiences they share, the difficulties they face and the practiced sustainability from the sustainability leaders' viewpoint in Turkey. The researchers used a qualitative research method. The sample consisted of (10) middle-level administrators working at the universities in the Marmara region. The findings indicated that the executives (leaders) of the institutions have a high level of awareness about lifelong learning and that increasing staff capacity plays a key role in sustainable leadership.

Filho et al (2020) conducted a study that aimed to reveal the main characteristics of sustainability leaders at HEI and the major challenges they face. The researchers used an online-questionnaire survey submitted to (50) leaders from a set of universities in 29 countries. The findings showed that the primary skills that a sustainability leader should possess were "Challenge and innovate", "Manage complexity", and "Think long term." The results also revealed that the main actions the leadership should undertake to foster institutional sustainable development were "Curriculum Change" and "Investment in Education for Sustainability". The results indicated that the most challenging factors were lack of funding and lack of support from administrations.

Khuraishah (2018) aimed to examine the level of principals' awareness of obstacles to the sustainability of education in Al-Zarqa Governorate and to identify the impact of the variables of gender, experience, and academic qualification. The study sample consisted of (300) male and female principals who were chosen randomly. The researcher used the questionnaire. To achieve the objectives of the study, the researcher used a questionnaire consisted of 71 items distributed into five areas. The findings showed that the level of school principals' awareness of the hurdles to the sustainability of education came at a high degree and the statistically significant differences were attributed to the gender variable. It also showed statistically significant differences attributed to the variable academic qualification in favor of (Ph.D. masters) and the experience variable attributed to the experience variable (10 years or more) and recommended the need to work to reduce obstacles to the sustainability of education.

Also, in Al- Zarqa Governorate, Jordan, a study aimed to identify the level of principals' awareness of the components of education in sustainable development and examine the impact of gender, educational qualification, experience, and school stage variables was conducted by (Bani Yassin, 2019). The study population consisted of all public secondary and basic school principals in Zarqa Governorate. The researcher used the questionnaire that was distributed to the sample (n= 257) principals. The results indicated that the level of awareness of school principals in Zarqa Governorate was high for the components of sustainable development and showed no statistically significant differences due to the variable of gender and experience, while there were statistically significant differences attributed to academic qualification and in favor of a community college diploma. While Sheikho's (2015) study aimed to identify the role of non-governmental institutions in supporting education to achieve sustainable development in the governorates of Gaza and to find ways to develop it. To achieve the objectives of the study, the researcher built a questionnaire comprised of (33) items. The study sample involved (42) organizations. The results of the study indicate differences in the responses of the study sample due to the variable academic qualification and favor of graduate studies and differences in the responses of the study sample due to the variable of gender and in favor of non-governmental organizations. It also did not show any differences in the responses of the participants attributable to the variable occupational status.

Khawaldah (2016) conducted a study aimed at identifying the obstacles facing the application of sustainability in higher education from the faculty members' viewpoint in Jordanian universities considering these variables (gender, university, and college, academic rank). The study sample consisted of 830 faculty members and to achieve the study objectives, the researcher used a questionnaire consisting of 48 items. The findings showed differences in the responses of the participants due to the variable of gender and in favor of males, and differences in favor of public universities and for the variable academic rank and in favor of the rank (professor).

Okour (2019) conducted a study aimed at demonstrating the importance of the education approach for sustainable development and its impact on creating a sustainable society committed to societal, environmental, and economic values. The researcher used the descriptive and analytical approach relying on the (Bonn, 2009) report on education for sustainable development and he followed the method of content analysis. The findings showed that there were differences attributed to the type of institution which was in favor of the private sector and differences in the role that education for sustainable development plays in the development of the economy and the environment. as well as some elements that contribute to achieving its goals through the promotion of education for all. The results of the study revealed the skills and values derived from the approach to education for sustainable development, such as promoting multicultural dialogue in the learning process and respecting global human rights. The Item of lifelong learning ranked first followed by communication between educational institutions, and the shortcomings in curricula and treatment ranked last.

In 2018, Siankou et al investigated the personal understanding of 'Sustainable Development' of scholars involved in teacher training programs and the academic field of Education for Sustainable Development. To achieve this purpose, an online survey was conducted based on the principle of comparative judgment to a sample of (249) academics in teacher training programs in various international schools, such as Canada, the United States of America, and Egypt. The questionnaire consisted of 16 items divided into four areas which were fragmented, separated, holistic, and integrated perspectives. The results indicated that the items most frequently chosen gave priority to the understanding of sustainable development, whereby two or three aspects of the concept (environment, society, economy) were separated from each other and less often in an integrated manner.

O'Flaherty & Liddy ( 2018) conducted a study entitled "The impact of development education and education for sustainable development interventions: a synthesis of the research" to examine the impact of intentional development education, education for sustainable development, and global citizenship education. The researchers reviewed (243) abstracts including 127 from Scopus, 101 from ERIC, and 15 from EBSCO. Abstracts. Where only (99) abstract met inclusion criteria and of the final 44 papers included for review, only 26 papers focused on education for sustainable development or environmental educational topics. The findings indicated that 12 studies were global orientated in content, either through development education or global citizenship, and 6 were intercultural educational interventions. And it also revealed that the differences in the participants' responses attributed to experience.

Yang, Lam, and Wong (2010) conducted a study entitled (Developing a tool to determine the beliefs of secondary local teachers for sustainable development). This study aimed to identify the beliefs and perceptions of teachers in Chinese schools to achieve sustainable development. To achieve the goals of the study, the researchers developed a tool to collect data examined four areas, namely, respect for the vital community, beliefs of democratic public safety, peace, and justice. The results revealed that there were differences in teachers' responses to the second area, which is the beliefs of public safety. From the foregoing, we notice that most of the studies used the methodology of analyzing university documents to achieve their goals, such as the study (Okour, 2019; O'Flaherty & Liddy, 2018). This study used the questionnaire as a tool for collecting data as did the study of (Bani Yassin, 2019; Khuraishah,2018 and Khawaldah, 2016) and the study of (Yang, Lam, and Wong, 2010).

While it differs in terms of diagnosing the reality of public education considering the fourth goal of sustainable development from the viewpoint of basic school principals in Jordan. It is also the first study in Jordan in terms of its quality and application, which dealt with a real applied measurement to reveal the fourth goal of the sustainable development goals in public schools.

*1.2. The fourth goal of the sustainable development goals: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.*

Khawaldah (2016) indicated in his book that the international educational community was able to take a deep breath and achieve collective comfort when it included a stand-alone goal regarding education within the sustainable development goals proposed by the open-ended working group of the General Assembly on 7/2014. The sustainable development framework alongside the Incheon Declaration, adopted by nearly 1,600 participants at the World Education Forum held in Incheon, the Republic of Korea in May 2015. This declaration embodies the commitment of countries and the global education community to a firm commitment to a single, comprehensive education plan. Education 2030 Framework for Action, which was adopted by representatives of nearly 180 UNESCO Member States in November 2015, illustrates the way to translate global commitments in the field of education into policy and practice at the country, regional and global levels. The fourth goal confirms that all females and males' children have access to quality early childhood development, care, and pre-primary education and they are prepared for basic education:

- Improving access to life skills learning
- A 50% improvement in adult literacy
- Achieving gender equality
- Enhancing the quality of education

Then another meeting was held, and eight Millennium Development Goals were added to the United Nations. The goal of universal primary education was one of these development goals and therefore it was considered the second goal of the Millennium Development Goals, it aims to achieve gender equality in education as part of the goal on gender equality and women's empowerment (UNESCO, 2020). A prominent opportunity now exists to present a more ambitious vision for education in the post-2001 development agenda. Preparatory work began in 2012, when the international educational community, under the joint leadership of UNESCO and the United Nations Children's Fund (UNICEF), embarked on a broad and intensive consultation to Determine the future education plan. This intensive process culminated in the Muscat Agreement, which was adopted at the Global Education for All, meeting held in the Sultanate of Oman in May 2014, which represents a common vision for education for the future. The global education community has therefore been reassured that the proposed fourth goal of sustainable development, which invites the international community to ensure quality, equitable and inclusive education for all and to promote lifelong learning opportunities for all, is closely aligned with the proposed goals of the Muscat Agreement. The discrepancies between the goals contained in the Muscat Agreement and those proposed by the Open-ended Working Group, the seven goals and the three means of implementation contained under Goal 4 of the Sustainable Development Goals lay out an ambitious education plan that would pave the way towards a sustainable and transformative future

The UNESCO, as the specialized agency of the United Nations in the field of education, supports the conviction that education is a fundamental human right and is closely linked to the realization of other rights. Accordingly, education is a public good for all individuals that contributes to the attainment of peace, sustainable development, gender equality, and responsible global citizenship. Education also contributes to reducing inequality and poverty. Undoubtedly, achieving full access to quality education at all levels is a prerequisite for accelerating progress towards achieving other sustainable development goals. The Education for All (EFA) goals and the internationally agreed Millennium Development Goals (MDGs) have attained far-reaching gains over the last fifteen years, and many states have adopted these goals as standards to reform and improve their education

systems, however, donors have adopted them to align their policies and priorities with development assistance.

Since 2000, the international community has made incredible progress in expanding educational opportunities and making education and learning accessible to millions of children around the world. Despite rapid population growth, the number of children of basic school age out of school decreased by 42% between 2000 and 2012, and this number witnessed a further decline for girls, by 47%. The number of adolescents out of school also declined by 31% between 1999 and 2011; While, during the same period, the gross enrollment rate in pre-primary education increased from 33% to 50%. The number of countries achieving gender parity increased from (91-101) between 1999- 2011. These remarkable successes demonstrate that achievable and measurable solutions are within reach and that they can unleash the inherent potential of all learners and create a world of prosperity, health, justice, and equality. Therefore, the international community must build on these successes and lessons learned over the past fifteen years, while persisting to find pioneering solutions and methods to deal with the uncompleted works of the EFA program. Although it has come a long way, there are still an estimated 58 million children out of school and nearly 100 million children who do not complete primary education. Actually, the poor quality of education at the primary level has led to about 250 million children leaving school without learning to read, write, or math skills, and at the same time an estimated 782 million adults, 64 % of whom are women still lack basic skills in reading and writing. That is why the plight of the hundreds of millions of children, adolescents, and adults who are being denied their right to education must not be neglected or forgotten. The post-2015 education agenda must also adequately find solutions to the entrenched impediments to education and learning and the emerging global challenges that we are now encountering.

Nowadays, the world is at a critical turning point as global crises threaten to reverse progress and undermine future achievements, and we are experiencing an increasing environmental degradation and an increase in the severity of the impacts of climate change, the deterioration of employment prospects for young people, the increasing challenges of migration and civilization and the continuing global economic downturn and violent conflicts for longer periods. The time has come to build and formulate sustainable development goals that will address the pressing challenges of the post-2015 period.

Furthermore, a technology-driven environment puts rising pressures on learners, students, companies, and even governments. Information-based economies need new styles and levels of skills and competencies, while lack of access to higher levels of ICT education and skills creates a knowledge gap between and within countries with significant implications for the economy and employment. UNESCO adopts an unequivocal position that the best way to address these formidable challenges is through an ambitious, transformative, and comprehensive post-2015 education plan that is of global significance and applies to all countries, regardless of their development status. UNESCO strongly advocates for a humane and holistic vision of education based on rights, with a broad perspective for lifelong learning to enable people to realize their right to education and learning for life. As the intergovernmental process continued at the United Nations in New York and discussed the adoption of the post-2015 development agenda at the Extraordinary Summit in September 2015, the international education community worked to prepare the groundwork to facilitate the functioning of the future education agenda at the national level.

UNESCO, in partnership with the United Nations Development Program, the United Nations Population Fund, UNICEF, UN Women, and the World Bank Group, convened the 2015 World Education Forum, hosted by the Government of the Republic of Korea 2015. The forum is considered a unique platform for global leaders in the field of education, policymakers, representatives of civil society, teachers, experts, and the private sector to identify the achievements and shortcomings in the implementation of the goals of education for all and the Millennium Development Goals related to education and confirmed agreement on a common position on Education goal and targets in the post-2015 development agenda.

UNESCO and its partners at the United Nations and beyond have recognized that strong national systems are indispensable for the effective implementation of quality, equitable and inclusive education, and they will continue to strengthen international technical cooperation to support countries most in need. UNESCO also continues to support countries in strengthening national monitoring capabilities while at the same time leading global coordination and monitoring efforts to implement the education plan within the post-2015 framework. Building on the Education for All Global Monitoring Report issued by UNESCO annually over the past twelve years, supported by data from the UNESCO Institute for Statistics, regular and independent monitoring will continue to track progress at the global level.

The international community has made great strides since the Global Movement for Education for All was launched in Thailand, in 1990 and reiterated in Dakar in 2000.. Despite unprecedented progress, the road to education for all is not yet over. To reach 2030, we have enormous challenges ahead. Therefore, the international community must strive, motivated by a more ambitious and transformative plan, to deliver better and greater performance and make more efforts if it wants to prove that education for all is truly achieved by 2030. We conclude from the foregoing that achieving quality and inclusive education for all confirms the conviction that education is one of the most powerful and stable means of achieving sustainable development. This goal confirms that right of all girls and boys to attain free basic and secondary education by 2030. It also provides equal opportunities for access to vocational training and is accessible to all, eliminating disparities in access to education due to gender or wealth, and achieving universal access to high-quality education as stipulated by standards. The fourth goal of sustainable development regarding “ quality education” based on these criteria, which came as follows:

- Ensure that all girls and boys get free, equitable, and quality basic and secondary education, leading to adequate and efficient educational outcomes by 2030.
- Confirm that all girls and boys have access to good quality early childhood development and care and pre-primary education so that they are ready for basic education by 2030.
- Confirm that all people “women and men” have equal access to affordable, quality vocational education and higher education by 2030.
- Significant increase in the number of young people and adults who have the right skills, including technical and vocational skills, to work, occupy decent jobs and start entrepreneurship by 2030.
- Remove gender disparity in education and ensure equal access to all levels of education and vocational training, including persons with disabilities, indigenous peoples, and children living in vulnerable situations, by 2030.
- Ensure that, by 2030, a significant proportion of all young adults, men, and women alike, are literate, including persons with disabilities, indigenous peoples, and children living in vulnerable situations.
- Ensuring that all learners acquire the knowledge and skills necessary to support sustainable development by 2030.
- Building educational facilities that consider gender differences, disabilities, and children, upgrading existing educational facilities, and creating an effective, safe, and violence-free learning environment for all.
- Significant increase in the number of school scholarships available to developing countries at the global level for developing countries for enrollment in higher education, including vocational training and information and communication technology grants, and technical, engineering, and scientific programs in developed countries, by 2030.
- Significant increase in the number of qualified teachers by 2030.

Accordingly, the school principal must be aware of the importance of achieving the sustainable development goals in general, and the fourth goal, which focuses on ensuring education for all, and this can only be attained through adopting the concept of sustainable development and working to achieve its goals and requirements by being keen on supporting education and developing it. Hence, this study came to examine the role of education managers in supporting sustainable development from the point of view of whoever represents it in public education schools.

### *1.3. Sustainable development:*

The fourth goal of the development goals ensure inclusive and equitable quality education and promote lifelong learning opportunities for all ( Unesco, 2015).

Sustainable development is a development that meets the needs of the present generation without undermining the capacity of future generations to meet their needs, and it involves two basic concepts: the concept of needs, particularly the basic needs of the people living in poverty which should be given utmost priority (Sheikho, 2015). Procedurally, it is an attempt to address the needs of members of Jordanian society and to try to meet their needs on a permanent and continuous basis, to enhance the quality of their lives so as not to undermine the opportunities of future generations. Khouly (2019) defined it as the process of change in which resource exploitation, investment trends, aspects of technological development, and institutional change harmonize, and it enhances the capabilities of the present and the future to fulfill human needs and aspirations. The importance of sustainability is represented in the following:

- Sustainable development seeks to raise the level of efficiency, productivity and to satisfy all the various basic needs that enable all individuals in societies to achieve and develop all their potentials and needs (Kelly, & D, 2004).
- Sustainable development goals seek to achieve a better life by improving the quality of life of the population through attention to the quality of education, high quality and equality for all, and focusing on it. (Dwikat, 2009).
- Sustainable development aims, through its principles, to consolidate the relationships of individuals and the environment surrounding them (Jadallah 2019). The most important requirement of sustainable development is to give priority to directing education efforts to achieve sustainable development, through literacy, education for all, and compulsory education in the primary stage. (Fries et al, 2017).

### *1.4. Quality education:*

As defined by ASCD and EI is one that concerns with the whole child, his social, emotional, mental, physical, and cognitive development regardless of gender, race, ethnicity, socioeconomic status, or geographic location. It seeks to prepare the child for life, not just for testing. Quality education is based on three main pillars: ensuring access to quality teaching staff, good use of quality learning tools and professional development; and providing a safe and supportive learning environment (Slade, 2017).

### *1.5. The main roles of Principal in Jordan*

The main roles of principals I Jordan are

- 1 .Take charge of the financial resources and the budget
- 2 .Prepare an annual plan (the school development plan based on the reality of the school that includes all areas of work within the school, including students, teachers, curriculum, examinations and tests, qualification and supervision, educational guidance, school facilities (library, scientific laboratories, computers), and school activities, the local community, and the school environment.
- 3 .Develops an emergency and crisis plan for the school

- 4 .Distributes the teaching courses to teachers in light of their specializations, capabilities, and needs of the educational program in the school, and supervises the preparation of the lesson arrangement program at the beginning of the school year.
- 5 .Supervises the administrative work carried out by members of the administrative body.
6. Supervises the provision of books, school curricula, and teachers 'guides, with modern and approved editions, and ensures that they reach all beneficiaries in the school.
- 7 .He holds meetings for the school's administrative and educational bodies to inform them of developments, directives, and instructions issued by the Ministry of Education.
- 8..Evaluate teachers' performance of the tasks assigned to them.
- 9 .Contributes to the teacher's professional growth by proposing appropriate programs that fulfill their needs inside and outside the school.
- 10 .Cooperates with the educational supervisors and facilitates their tasks and follows up on the implementation of their recommendations and directives, with the initiative to call the specialized supervisor when needed.
11. Provides the Education Directorate with the comments received by teachers regarding curriculum analysis and its suitability for the educational stage.
- 12 .Support gifted students and works to provide special programs that suit their needs and abilities
- 13 .Supervise the exams, results, and analysis to develop programs to address students' weakness point in cooperation with the teachers, the assistant, and the educational counselor
14. .Supervises the school environment, buildings, and laboratories.
15. .Follow up on students' problems and identify the sick cases of some students.
16. Enhances the social role of the school and opens horizons for cooperation and integration between the school and its parents.
17. Evaluates the performance of school staff at the end of the school year.

#### *1.6.Study Problem and Questions*

This study aims to address the role of principals in public education schools in achieving the fourth goal of the sustainable development goals from the teachers' viewpoint, as they are the main factor in developing community influencing the education sector, and the importance of their role in sustainable development, as the more principals apply the principles of sustainable development, opportunities for development in society increases.

- 1.What is the role of the principals in achieving the fourth goal of the sustainable development goals from the teachers' viewpoint?
2. Does the role of principals in achieving the fourth goal of the sustainable development goals from the teachers ' viewpoint according to (teaching stage, experience, specialization, qualification)?

#### *1.7.The importance of the study*

The importance of this study stems from:

- 1 .The importance of the topic it addresses, which is the role of principals in achieving the fourth goal of the sustainable development goals.
- 2 .The importance of principals' contribution in satisfying the needs of current generations in the Jordanian society through the application of the fourth goal of the sustainable development goals.

3. Coming up with a proposed vision from the teachers' viewpoint that may contribute to activating the fourth goal of sustainable development goals, starting with setting goals, setting the plan, implementing it, following up, and evaluating it.

### 1.8. Study Objectives

1. Identifying the role of the principals in achieving the fourth goal of the sustainable development goals in the Jordanian society, and this is done through the following sub-indicators: (stage of the study, experience, specialization, academic qualification).

2. Identifying the degree of differences in teachers' views on the level of principals' implementation of the fourth goal of the sustainable development goals.

## 2. Methods and Procedures

This section addresses the methodology used in the study, the description of the study population and sample, the tool, the methods used to verify the validity and reliability of the tool, the study variables, and the statistical treatment required to analyze the data and conclude the results. To achieve the objectives of the study, the researcher followed a descriptive survey approach, an online survey was administered electronically via social networks (e.g., Facebook, Instagram), e-mail, messaging groups (e.g., WhatsApp) to the principals in the first semester of the academic year 2020/2021

### 2.1. Population and sample

The study population consisted of all the (3865) male and female public and private principals in the Hashemite Kingdom of Jordan during the first semester of the academic year 2020/2021. The randomly selected sample comprised of (387) public and private principals. The questionnaire was distributed electronically to all the sample members, and all the questionnaires were retrieved and all of them were subject to analysis and coding representing (10.1%) of the original population of the study as shown in Table (1).

Table 1. *The distribution of the study sample*

Variables	Categories	Frequency	Percent
Gender	Male	168	43.4%
	Female	219	56.6%
	Total	387	100%
Type of school	Public	266	58.4%
	Private	161	41.6%
	Total	387	100%
Experience	Less than 5 years.	130	33.6%
	5-10 years	162	41.9%
	More than 10 years	95	24.5%
	Total	387	100%

### 2.2. Instrument

The researcher designed the study tool according to the standards of the fourth goal of the sustainable development goals set by UNESCO in 2014. The questionnaire consisted of (35) items that were applied to Jordanian school principals.

To check the face validity of the tool, it was presented to specialized arbitrators from faculty members in Jordanian universities with at educational colleges to check the items' relevance, clarity, and appropriateness. All the arbitrators' suggestion was taken into consideration, (80%) was agreed by the arbitrators and a criterion for judging its validity.

To verify the construct validity, the study tool was applied to an exploratory sample consisting of (35) public and private principals in the Hashemite Kingdom of Jordan from outside the target

sample. To identify the validity of the internal consistency of the tool the coefficient Pearson Correlation was used as indicated in Table (2).

Table 2. Correlation Coefficients for the items and the overall degree of the field

NO.	Coefficients	Sig	NO.	Coefficients	Sig	NO.	Coefficients	Sig
1	0.800 **	0.000	13	0.877**	0.000	25	0.816**	0.000
2	0.839 **	0.000	14	0.827**	0.000	26	0.833**	0.000
3	0.781 **	0.000	15	0.911**	0.000	27	0.897**	0.000
4	0.798**	0.000	16	0.850**	0.000	28	0.833**	0.000
5	0.763 **	0.000	17	0.874**	0.000	29	0.820**	0.000
6	0.823 **	0.000	18	0.880**	0.000	30	0.798**	0.000
7	0.809 **	0.000	19	0.749**	0.000	31	0.871**	0.000
8	0.825 **	0.000	20	0.843**	0.000	32	0.714**	0.000
9	0.775 **	0.000	21	0.816**	0.000	33	0.838**	0.000
10	0.750 **	0.000	22	0.833**	0.000	34	0.744**	0.000
11	0.798**	0.000	23	0.750**	0.000	35	0.838**	0.000
12	0.871 **	0.000	24	0.777**	0.000			

\*\*statistically significant at the level (0.01 =  $\alpha$ ).

\* Statistically significant at (0.05 =  $\alpha$ ) level.

Table (2) shows that the correlation coefficient values of the items ranged between (0.714-0.911) with an overall degree, and all these values are considered statistically significant, meaning that there is a degree of internal consistency validity.

To verify the reliability of the study tool, the internal consistency method was applied (Cronbach`s Alpha), as the tool was applied to a sample consisting of (35) public and private principals in the Hashemite Kingdom of Jordan from outside the target study sample as shown in Table (3).

Table 3. Cronbach`s alpha for internal consistency.

Field	Cronbach`s Alpha	Items
Overall tool	0.933	35

Table (3) shows that the value of the Cronbach reliability coefficient for the overall tool is (0.933). These values are considered appropriate for the current study.

### 2.3. Study variables

First: the independent variable:

- 1 .Gender variable: It has two levels (male, female)
- 2 .School type variable: it has two levels (public and private).
- 3 .Experience variable: It has three levels (less than 5 years, 5-10 years, more than 10 years).

Second: Dependent Variables: The role of Jordanian school principals in achieving the fourth goal of the sustainable development goals from their point of view.

#### 2.4. Statistical treatment

The statistical treatments of the study data were carried out using the Statistical Package for Social Sciences (SPSS), as follows:

- To answer the first question, means and standard deviations of the tool items.
- “The role of Jordanian principals in achieving the fourth goal of the sustainable development goals” were extracted from their point of view.
- To answer the second question, the Three-Way ANOVA test was used on the overall score of the tool for the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals from their viewpoint according to the variables of gender, school type, and experience. Scheffé’s post hoc test was used.
- Frequencies and percentages were calculated to determine the distribution of the study sample according to the variables.
- The Cronbach-Alpha was used to find the internal consistency coefficient, to ensure the reliability of the study tool.
- Pearson correlation coefficient was used to find the internal consistency validity coefficient for the study tool items.
- The five-step Likert scale was adopted to correct the study measures, as each of its items is given a score of one out of five degrees (very high, high, moderate, low, very low), which are represented numerically (5, 4, 3, 2,1). Accordingly, the following scale has been adopted to analyze the results as shown by using the following equation:

$$\frac{\text{Maximum length} - \text{Minimum length}}{\text{Levels}} \frac{5-1}{3} = 1.33$$

- The first range:  $(1 + 1.33 = 2.33)$ , and accordingly the estimate becomes less than or equal to  $(2.33)$  low.
- The second range:  $(2.33 + 1.33 = 3.66)$ , greater than  $(2.33)$  and less than  $(3.67)$  moderate .
- The third range:  $(3.67 + 1.33 = 5)$ , and accordingly the estimate becomes greater than or equal to  $(3.67)$  high.

### 3. Result and discussion

The study aimed to identify the role of Jordanian principals in achieving the fourth goal of sustainable development from their point of view, and to achieve these goals the study sought to address the following questions:

#### 3.1. Results of the first question:

What is the role of Jordanian principals in achieving the fourth goal of sustainable development from their viewpoint? To answer the first question, means, standard deviations, estimation, and ranks of the role of Jordanian principals in achieving the fourth goal of sustainable development were gauged from their viewpoint on the items and the results were as illustrated in Table (4).

Table 4. Means and standard deviations of the tool

NO.	Items	Mean	SD	Rank	Degree
23	Motivating teachers to adhere to the ethics of education	3.93	0.94	1	high
6	Providing learning opportunities for all students in the school	3.84	1.02	2	high
18	Creating a safe educational environment for all	3.84	0.96	2	high

NO.	Items	Mean	SD	Rank	Degree
22	Monitoring student performance and academic achievement	3.80	1.01	3	high
3	The principal directs teachers to take responsibility for their performance	3.77	0.94	4	high
13	Spreading a culture of peace and non-violence among students by 2030	3.77	0.98	4	high
11	That the learner acquires human rights and gender equality	3.75	0.96	5	high
14	Applying the concept of global citizenship in extracurricular and extracurricular activities in the school	3.74	0.97	6	high
24	Providing aid to needy students	3.73	1.06	7	high
30	Encouraging community initiatives in carrying out school activities	3.70	1.02	8	High
31	Attention is given to the participation of teachers in the school	3.68	0.94	9	high
1	The school provides all students with a quality education	3.66	0.89	10	moderate
2	The school achieves adequate and effective educational outcomes	3.65	0.90	11	moderate
21	Developing existing educational facilities to facilitate the learning and teaching process for students	3.65	0.95	11	moderate
17	Attention is being paid to building educational facilities that consider gender differences	3.64	0.95	12	moderate
33	The school contributes to setting awareness programs to protect students from violence	3.63	1.08	13	moderate
10	learner to acquire an education to achieve sustainable development and to adopt sustainable livelihoods	3.61	1.04	14	moderate
29	Uses social media sites to communicate with the local community	3.60	1.09	15	moderate
8	Encouraging teachers to introduce educational initiatives for students	3.59	1.04	16	moderate
16	That the learner acquires an appreciation of cultural diversity and an appreciation of the contribution of culture to sustainable development	3.59	0.87	17	moderate
35	The school provides opportunities for the growth of thinking to students	3.59	1.07	17	moderate
7	Allowing special groups to learn according to educational legislation	3.58	1.09	18	moderate
9	All learners acquire the knowledge and skills necessary to support sustainable development	3.58	1.00	18	moderate
26	Encouraging teachers to use school resources effectively	3.58	0.95	18	moderate
27	Encouraging students to use school resources effectively	3.58	1.02	18	moderate
15	By 2030,cultural diversity shall be valued in sustainable development	3.56	0.92	19	moderate
25	Seeks to provide funding from community institutions ornaments for school activities	3.54	1.07	20	moderate
12	That students have opportunities to express themselves	3.53	1.08	21	moderate
19	Providing vocational training opportunities, information and communication technology, and technical, engineering, and	3.52	1.15	22	moderate

NO.	Items	Mean	SD	Rank	Degree
	scientific programs in developed countries				
4	The school provides an education that guarantees equal opportunities	3.48	1.04	23	moderate
28	Encouraging local community members to use school resources effectively	3.48	1.11	23	moderate
34	The school offers specialized seminars in the field of psychological development for students	3.40	1.11	24	moderate
20	The school building is suitable for people with disabilities, and children	3.23	1.15	25	moderate
32	Rooms are available for extracurricular activities	3.23	1.10	25	moderate
5	The school focuses on mastering students' technical and professional skills	3.19	1.18	26	moderate
<b>Overall mean</b>		<b>3.61</b>	<b>0.75</b>		<b>moderate</b>

Table (4) shows that the means of the role of Jordanian principals in achieving the fourth goal of the sustainable development ranged between (3.19 - 3.93), with an estimation level (moderate-high), while the overall mean is (3.61), a standard deviation (0.75) and a moderate degree. The researcher attributes this result to the principals' honest responses to the questionnaire, and she also attributes this result to the fact that the Jordanian educational systems are proceeding successfully towards achieving what the principles of comprehensive development aspire to, as it focused on the need to understand all concepts related to the natural and geographical environment. This result differed with the study of (Sheikho, 2015) which showed that the role of non-governmental institutions in supporting education to achieve sustainable development in the governorates of Gaza was low, and the study of (Bani Yassin, 2018) which showed that school principals' level of awareness of the components of sustainable development was high. And (Khreisheh 2018), which concluded that the level of awareness of school principals of the obstacles to the sustainability of education was high.

The results also showed that there are statistically significant differences in the estimates of the participants attributed to the variable of gender as in the study of (yang & lam & wong, 2010) which concluded that there were differences in the teachers' responses to the study tool for the second domain which is public safety beliefs. The study agreed with the study of (Siankou et al, 2018), which showed that the responses of teachers in Canada to the implementation of sustainable development in education came with a moderate degree.

Item (23) which states "motivating teachers to adhere to the ethics of education" ranks first with a mean of (3.93), and a high degree. The researcher attributes that to the fact that the Jordanian educational systems under the Higher Education Law of 1994 set several goals to be met and linked it to job ethical codes of conduct. It also clearly indicates the ethics of education and its importance in achieving the aspirations of sustainable development. Item (6) which states "Providing learning opportunities for all students in the school" ranked second with a mean of (3.84) and followed by Item (18) which states "Creating a safe and free from violence educational environment for all" with a mean (3.84), with a high degree. Where Item (5) came in the last place, stating that "The school focuses on mastering students' technical and professional skills" with a mean of (3.19) and a moderate degree.

### 3.2. Results of the second question:

Are there statistically significant differences at the level of ( $\alpha = 0.05$ ) in the averages of the sample estimates, the role of Jordanian school principals in achieving the fourth goal of sustainable

development from their point of view according to variables (gender, school type, and experience)? To answer this question, the means, and standard deviations of the responses of the respondents on of the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals from their point of view according to the study variables were calculated as shown in Table (5).

Table 5. Means and standard deviations of the study tool

Variables	Categories	NO.	Mean	SD
Gender	Male	168	3.87	0.67
	Female	219	3.39	0.74
	Total	387	3.61	0.75
School type	Public	226	3.39	0.76
	Private	161	3.92	0.62
Experience	Total	387	3.61	0.75
	Less than 5 years	130	3.30	0.77
	5 - 10	162	3.86	0.67
	10 years or more	95	3.60	0.71
	Total	387	3.61	0.75

Table (5) indicates that there are clear differences between the averages of the responses of the participants on the overall degree of the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals from their point of view according to the study variables, and to clarify the statistical differences between the mean, the Three-Way ANOVA analysis used on the overall score of the scale as shown in Table (6).

Table 6. The results of the Three-Way ANOVA analysis on the overall score of the scale

Source of variance	SS	DF	MS	F value	Sig
Gender	2.843	1	2.843	6.092	*.014
School type	8.304	1	8.304	17.792	*.000
Experience	7.404	2	3.702	7.932	*.000
Error	178.280	382	.467		
Overall	218.309	386			

\*\* Statistically significant at ( $\alpha = 0.05$ ).

By examining Table (6) we conclude that:

1) There are statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the means of the sample's estimates on the total score of the role of Jordanian school principals in achieving the fourth goal of sustainable development from their viewpoint attributed to the difference in the gender variable, as the overall (F) value on the scale reached (6.092) with the level of significance (0.014), and this value is considered statistically significant at ( $\alpha = 0.05$ ), where the differences are in favor of males who their responses record a mean of (3.87) that is higher than females mean ( 3.39). The researcher attributes this to the different men and women in terms of interests, as males usually favor the issues of sustainable development. This result is consistent with the study of (Bani Yassin,2018), Which showed differences in the responses of the study sample due to the gender variable and in favor of males and (Khawaldah, 2016; O'Flaherty & Liddy, 2018; Khuraishah, 2018) which indicated significant differences attributed to gender variable in favor of male variable.

2) There are statistically significant differences at ( $\alpha = 0.05$ ) between the averages of the

sample's estimates on the total score of the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals from their point of view due to the difference in the scientific qualification variable, as the statistical F value reached (17.792) with the level of significance (0.000), this value is considered statistically significant at ( $\alpha=0.05$ ), where the differences are in favor of private schools with a mean of (3.91) higher than the mean of public schools mean (3.38). The researcher attributed this to the private sector's keenness and its high and parallel efforts to achieve sustainable development that its focus is on achieving the concepts of comprehensive development and that its efforts are not less than the public sector efforts in focusing on the developing quality education and providing it in their schools. It also indicates the effective participation of the private sector in proving the importance of education and achieving sustainable development in their institutions. This result is consistent with the result of (Okour, 2019) which showed differences in the responses of the study sample attributed to private schools and it did not differ from the previous studies.

- 3) There are statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the averages of the sample's estimates on the total score of the role of Jordanian school principals in achieving the fourth goal of the sustainable development goals from their point of view due to the difference in the experience variable, as the statistical value of the test reached (F) On the scale as a whole (7.932) with the level of significance (0.000), and this value is considered statistically significant at ( $\alpha = 0.05$ ).

To identify the statistically significant differences of the role of Jordanian school principals in achieving the fourth goal of sustainable development from their point of view according to the difference in experience variable, Scheffe's method: post hoc" was used as shown in Table (7).

Table 7. Results of Schefft's method " post hoc" according to the experience variable

Experience	Mean	Less than 5 years	5-10	More than 10
Less than 5 years	3.30	-	*.000	*.006
5-10 years	3.86		-	*.011
More than 10 years	3.60			-

\* Statistically significant at ( $\alpha = 0.05$ ).

Table (7) shows that there are statistically significant differences at the level of statistical significance ( $\alpha = 0.05$ ) between the means of the respondents' estimates due to the effect of the experience variable, as the differences between the two categories (less than 5 years) and (5-10) came in favor of the category (5 -10) and with a higher mean. Also, there are statistically significant differences between the category (less than 5 years) and (10 years or more) and the differences were in favor of the category(10 years or more) with a higher mean. Table (7) also shows that there are statistically significant differences between the category (5 - 10) and (10 years or more) and the differences were in favor of category (5 - less than 10) with a higher mean. The researcher attributes this to the importance of long experience in adopting modern educational developmental concepts, the more experience principals have, the greater their awareness of the importance of facing new updates in the field of education, which This is evidence of the educational directors' emphasis on reminding school principals of all new developments through their periodic meetings and conducting periodic sessions and seminars to promote the growth of the principals. This result agrees with the study of (Bani Yassin, 2018) which revealed statistically significant differences attributable to academic qualification and in favor of the Community College Diploma and (Khuraishah, 2018) which showed differences in favor of experience, and attributed to those with experience of ten years or more and recommended the need to work to reduce obstacles to the sustainability of education. And the results of this study are consistent with the study of (Sheikho, 2015, O'Flaherty & Liddy, 2018).

#### 4. Recommendations

- Holding periodic courses and workshops to promote principals' awareness of the requirements of the employing of the fourth concept of sustainable development and to ensure its further activation in Jordanian schools.
- Establishing comprehensive and achievable transformative plans and developing them to enhance the capacities of school principals to implement the effective fourth goal of quality, equitable and inclusive education for all.
- Uniting the efforts of all officials in the Ministry of Education to implement the fourth goal.

## References

- Bani Yassin. A. (2018). *Perception level of school principals in Zarqa Governorate of the components of education for sustainable development*, unpublished Ph.D. thesis, Al-Bayt University.
- Ben Arabeya, M. (2018). The role of quality higher education in achieving sustainable development, *Journal of Economics and Law*, 1 (3): 145-166.
- David, k, & Kelly (2004), *D, steam capstone project Guide*. Avery sTEM Academy, North Carolina school of science and Mathematizes, 56
- Dwikat, K. (2009) *The role of postgraduate studies and scientific research in achieving sustainable development in Palestine*, unpublished master's thesis, Al-Quds University, Palestine.
- Filho, W., Eustachio, J., Caldana, A., Will, M., Salvia, A., Rampasso, L., Anholon, R., Platja, J., and Kovaleva. M. (2020). Sustainability Leadership in Higher Education Institutions: An Overview of Challenges *Sustainability*, 12, 3761; doi:10.3390/su12093761 [www.mdpi.com/journal/sustainability](http://www.mdpi.com/journal/sustainability)
- Fries, R. cross, B., Zhou, j. & Verbalise, c (2017), *How student written communication skills Benefit During participation in an industry-sponsored civil Engineering capstone course* pp1-11
- Hassan, I. (2020). Integration of educational outputs entrances STEAM development and the requirements of steam and overall sustainability, *International Journal of Research in Educational Sciences*, 3 (3): 198- 230
- Higher Education Law. (1994). *Education Law No. 3 and its amendments*.
- Jadallah, B. (2019). *Capston Scientific Complementary Projects and Its Role in Achieving Sustainable Human Development among General Secondary Education Students in Egypt: A Field Study*, Arab Center for Education and Development, 26 (122): 190-220
- Khawaldah. T. (2016) Knowing the obstacles to the sustainability of higher education from the point of view of faculty members in Jordanian universities, *Educational Sciences Studies*, Vol. 48 (1): 87-67.
- Khouly, O. (2019). Sustainable Development between Concept and Application, 2nd Edition, Cairo, Al-Jusoor Journal of Development, 1, Nineties Generation Center.
- Khuraishah, G, E. (2018). *The level of perception of school principals in Zarqa Governorate to the obstacles to the sustainability of education*, an unpublished master's thesis, Al-Bayt University.
- Lotz- Sisitka, H. (2013). Conceptions of quality and 'learning as connection': Teaching for relevance. *Southern African Journal of Environmental Education*, 29, 25–38.
- O'Flaherty, J & Liddy, M. (2018). The impact of development education and education for sustainable e development interventions: a synthesis of the research. *Environmental Education Research*, 24 (7), 1031-1049, DOI: 10.1080/13504622.2017.1392484
- Okour, N. (2019). Developing the Jordanian education to activate the contribution of youth to sustainable development according to the UN reports translated into Arabic. *Journal of Educational and Psychological Sciences* 3 (14): 71-90.
- Rajab, A, A. (2017). Human development requirements in the social studies curricula at the professional preparatory stage: an evaluation study. *Journal of the Faculty of Education, Zagazig University*, 1 (4) 270-171.

Abu shaqra, R. K. Y (2021). The role of Jordanian school principals in achieving the fourth goal of the sustainable development goals. *Cypriot Journal of Educational Science*. 16(1), 167-186. <https://doi.org/10.18844/cjes.v16i1.5518>

Slade, S. (2017). What Do We Mean by a Quality Education?. The Pal Network. <https://palnetwork.org/what-do-we-mean-by-a-quality-education/>

Sheikho, A, A. (2015). *The role of non-governmental organizations in disrupting education to achieve sustainable development in the governorates of Gaza and ways to develop it*, Islamic University, Gaza, Palestine.

Sinakou, E, Boeve- de..J, Maarten. P, Petegem. P.V. (2018). Academics in the field of Education for Sustainable Development: Their conceptions of sustainable development. *Journal of Cleaner*,184, 321- 332.

Ta,şçı, G and Titrek, O. (2020). Evaluation of Lifelong Learning Centers in Higher Education: A Sustainable Leadership Perspective., *Sustainability* 12, 22 UNESCO.(2020.) *The fourth goal is to ensure quality, equitable and inclusive education for all and to enhance opportunities for lifelong learning* Retrieve in 1/10/2020 from <https://www.un.org/ar/chronicle/article/20261>

UNESCO, (2020), *The United Nations development program in the Arab*. Retrieve in 10/1/2020 from <https://www.arabstates.undp.org/content/rbas/ar/home/sustainable-development-goals/goal-4-quality-education.html>.

UNESCO. (2015). *Sustainable Development Goals*. Retrieve on 10/7/2020 in <http://en.unesco.org/sdgs>.

United Nations, Economic and Social Council (1997). *The Declaration on Environment and Development Rims: Application and Implementation*, Commission on Sustainable Development, Fifth Session, at <http://www.un.org>.

Yang, G & Lam, Ch. & Wong, N, (2010), Developing an Instrument for Identifying Secondary Teachers Beliefs About Education for Sustainable Development in China China, *The Journal of Environmental Education*, Vol,41, Issue, 4, 195-207