The Role of Higher Education in Sustainable Development: A Case Study at Yarmouk University

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Abstract

This study aimed to identify the role of higher education in sustainable development. To achieve the objectives of the study, a qualitative approach was used, through content analysis of twenty-six written essays as responses of graduate students in education at Yarmouk University. The results indicated that there are challenges hindering the role of higher education in achieving sustainable development, the low level of education in scientific research, and low financial support. The study recommends allocating more resources for the development of research centers and specialized centers in the fields of scientific research, the development of specialization plans to keep pace with the labor market and encouraging the development of innovations and new solutions to achieve sustainable development. The study also recommends developing partnerships between local educational institutions and other international partnerships, encouraging cultural exchange, and forming strong educational and research links between universities and scientific institutions abroad.

Keywords: Higher education, sustainable development, case study.

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Introduction

Education is considered the basis for the progress of peoples and nations, so countries seek to develop their education, as it depends in many of its stages on traditional education, of which the bulk of the burden falls on the teacher and the passive student. Thus, scientific, and educational institutions seek to find modern methods of teaching aimed at encouraging the student to be active and positive and the teacher to be a mentor and guide in order to achieve the outputs of education. This can be done by mixing traditional education with e-learning with its multiple styles and technological and electronic innovations inside and outside the classrooms. So, it focuses on traditional and electronic teaching at the same time (Aslan, 2015).

Nowadays, nations have realized that education is not restricted to what is done in the classroom under the teacher' supervision, it is a much more comprehensive and broader process. They also realized that learning is not restricted to some chalk, a blackboard, and a notebook; rather, there are many means and media through which an individual can learn. At the forefront of these means and media comes the computer, with its high capabilities in storing and processing data, and drawing conclusions to impose itself as one of the most important aids in teaching, one of the most important sources in self-learning, and an alternative to the textbook (Al-Mousawi, 2020).

Nasiulina (2015) also noted that the UNESCO General Charter recognized the Earth Charter Conference as an important ethical framework for surrounding sustainable development with an oriented framework or educational tool called Education for Sustainable Development.

Sterling (2004) stressed that attention should be drawn to important values such as the values of guiding and preserving natural resources and called for education to adopt an international set of values, attitudes, and skills as a new direction for sustainable development. Moreover, the UNESCO stressed the need to adopt the approach of Education for Sustainable Development (ESD) as a program of importance for achieving the sustainable development goals (SDGs), as it is considered one of the important means aimed at

achieving UNESCO's programs for sustainable development. The participants strongly expressed their desire for a tool to strengthen and improve the sustainability of such programs.

According to the UNESCO report (2015), the ESD Program calls for supporting the objectives of development programs in linking society, the environment, and the economy. In addition to (i) encouraging policy makers and practitioners in member states to embark on the process of reorienting education, especially the formal education system, towards sustainable development; (ii) integrating concepts, skills, and values inherent in sustainability and development in all aspects of national education plans; and (iii) changing lifestyles and behaviors that allow for a more sustainable and just society to improve the quality and relevance of education everywhere. This program also invites governments to (1) consider incorporating local development plans into their educational systems, strategies, and policies for the practice of education; using the ESD perspective by understanding sustainable development, the implications on education and national development policies, and their relationship with educational policy; (2) reviewing the objectives of education and their implications for local and global policies, (3) reviewing how ESD contributes to achieving good educational outcomes, supports the quality of teaching and learning, and creates responsible young people; and (4) how to achieve sustainable development for growth and improving it in curricula and planning, teaching methods and teaching materials, learning and assessment, practice of teacher education, and school management.

Sustainable development has a variety of objectives due to the role it plays, as it is concerned with many aspects that provide a decent life for individuals in various fields. These objectives include (a) dealing with natural resources and employ them for the benefit of man without causing disruption in the components of the environment; (b) eradicating poverty and creating educated and conscious generations by working to develop appropriate social protection systems and measures at all levels, (c) working to define legal and political frameworks in all countries in order to inform the citizen of his rights and duties in order to alleviate the burden both on

the State and on the citizen at the same time; and (d) guaranteeing all rights, especially economic ones on the one hand, and providing academic education on the other hand, at all levels and in all institutions to all individuals, regardless of their gender, ethnicity and economic status (Assaf, 2015).

Characteristics of education for Sustainable Development:

Education for sustainability has many characteristics that enable it to contribute to achieving sustainable development, as Dahan and Zagacho (2018) pointed to a set of characteristics based on four main pillars, namely: Education for knowledge, education for living, education for work, and education for knowledge transfer. These characteristics are consistent with achieving a just, equitable, and peaceful world that encompasses the sustainability of cultural, social, and economic resources; encouraging the diagnosis of individuals' needs for education and learning; formulating goals and providing appropriate sources to achieve these goals; and selecting and implementing strategies to assess their educational outcomes.

Education is a process that recognizes that meeting local needs often has international impacts and incorporates the three basic dimensions of sustainable development. It is adapted to keep pace with the evolving nature of the concept of sustainable development, considers local and international problems, actively contributes to finding solutions to them, builds civic capacities necessary for community decision-making, promotes tolerance and environmental management, and is based on the principles of teamwork and improving the quality of life in order to achieve the concept of sustainable development. Education is considered multidisciplinary, as each discipline contributes to the activation of sustainable development. It is based on the use of a variety of pedagogical technologies that enhance participatory education and thinking skills and provide the necessities for transforming societies into more sustainable societies. It is also performance-based and seeks to achieve community success, development, well-being, and quality of life.

Based on the above, this study is important because it could provide an insight into the relationship between education and sustainable development in Jordan and identify the reasons behind Jordan's low level of global indicators related to education. In addition, to analyze the reasons for Jordan's low interest in international indicators that measure the integration of sustainable development in higher education and identify challenges and gaps, leading to more effective and efficient interventions and policies, both national and international ones.

Problem Statement:

Sustainable development has become a crucial issue for societies around the world, which has led to increased attention being paid to the role of the education sector in achieving the SDGs (Theinat, Banihani and Najadat, 2023). While many countries have made great strides towards integrating sustainable development into their educational systems, Jordan's progress in this area has been below average. Although education in Jordan is considered somewhat advanced, Jordan's international rank at the education level is 70, while at the Human Development Index is 102. This raises questions about the reasons for the low interest in sustainable development in education in Jordan, as this figure is considered a low indicator of human development globally. This study explores the relationship between education and sustainable development in Jordan, as well as the main challenges that Jordan faces regarding integrating sustainable development into its educational system, trying to explain the low level of human development. Therefore, this study seeks to answer the following research question: How to explain the low ranking of education in Jordan and in the world HDI?

Study Objectives

1. Explore the role of higher education in sustainable development in Jordan and identify the needs and strategic plans.
2. Evaluate higher education in Jordan and identify the strengths and weaknesses of the educational process, and how to enhance the positive aspects to achieve sustainable development.

Significance of the Study

1. It is hoped that the results of the study will be useful in developing policies that are in line with the SDGs.
2. The study can help identify the challenges and gaps that hinder progress in achieving the SDGs.
3. The study can help policy makers and university faculty develop strategies and interventions to address these challenges and gaps, leading to an improvement in the quality and relevance of education in Jordan.
4. The results of the study may help to increase awareness and understanding of sustainable development issues and their integration into higher education.
5. The study hopes to enrich the literature review on sustainable development in higher education.

Operational Terms

Sustainable development is the utilization of the resources that an individual needs in the long run in order to create an environment that gives and sustains life (Shahid, 2014).

Study Limitations

Human limitation: This study is limited to female students at the Department of Educational Administration in the Faculty of Education, at Yarmouk University.

Spatial limitation: This study is limited to Yarmouk University.

Time limitation: The study is limited to the first semester of academic year 2021/2022.

Previous Research

Issa et al. (2021) conducted a study that aims to highlight the importance of education in order to achieve sustainable development as one of the topics that receive great attention in all countries of the world, due to being an important issue at the present time, and the focus of its attention is to improve three basic aspects, which are related to the economic, social, and environmental aspects, and to achieve This concept of sustainable development must be taught to young people, and this is done by including it in the educational

curricula. To teach sustainable development and its consolidation, it requires specific methods, and sustainable development needs components for its education, and these components must be considered in the educational process and environment. Sustainable development requires a set of approaches that must be activated, and to consolidate sustainable development in education, several specific teaching methods for this purpose must be followed. This is to help students in education achieve sustainable development. The intervention also highlighted some of the competencies necessary to achieve the goals of sustainable development, as well as the needs of education for sustainable development.

Ben Youb et al. (2019) conducted a study that aimed to identify the extent of the development of higher education in Algeria since its independence, with reference to the extent of achieving the general goals that higher education should achieve, based on the opinions of faculty members regarding the nature of the problems and challenges facing higher education. The results of the study indicated that the university is not only a station that provides science and knowledge, but its role is even greater, namely to make university education rise to the level of higher education in all countries of the world and to achieve periodic development every semester. In the same context, the researcher found that the available university freedoms and rights are a space for discussion, cognitive development, cultural exchange, consolidation of national principles, and working on building successful scientific relations, and the absence of these relations hinders the development of higher education.

Abd El-Aal et al. (2020) conducted a comparative study that aimed at presenting a proposal for implementing Education for Sustainable Development (ESD) in various educational systems in Egypt considering the experiences of Germany and Austria, identifying the reality of ESD in Egypt, and determining the obstacles that face integrating ESD into the Egyptian educational systems. Considering the study problem, limitations, and objectives, the study followed the comparative approach through practical measures that included conducting a descriptive study of the reality of ESD in Germany, Austria, and Egypt by displaying and viewing the

educational systems and their components through studies, theoretical research, references, reports, and scientific journals. The instruments used in the study were: First, designing a standard for comparison, which displays the integration of the concept of ESD through all elements of the educational process, such as (curricula, school materials, school environment, school activities, and continuous teacher training). First, preparing a proposed model for integrating ESD and including it within educational systems for general education stages in Egypt in light of the experiences of Germany and Austria. The study results revealed that the process of implementing ESD is carried out through applying an integrated approach during curriculum designing, where the concept is not presented as a separate topic or an independent subject but is being pushed as a teaching principle that aims to integrate all sustainable development goals according to the teaching method of the study subjects that are linked to sustainable development goals, whether social, economic, or environmental. Curricular and extra-curricular activities play a fundamental role in enhancing and consolidating the ESD principle.

These activities are prepared and formulated according to sustainable visions by incorporating sustainability issues, goals, dimensions, and principles. The school activity is prepared in a coordination framework that includes the school administration, teacher, student, and community partners. Considering benefiting from the experiences of the compared countries, and the results of the study on the reality of ESD, a proposed vision was prepared to implement ESD in the Egyptian educational systems. The study recommended supporting the modernization of the theoretical and conceptual development of ESD; determining the links between ESD and other aspects of learning such as continuing education, adult education, and literacy; linking ESD with different subjects such as chemistry, physics, geography, and languages through the merger approach; identifying the appropriate teaching methods and the necessary pedagogical methods that are designed in accordance with the concept of ESD with the aim of achieving the goals of sustainable

development; and increasing the quality of teaching, research, and learning through teacher's continuous training during service.

Hussein and Lakhdar (2020), also conducted a study that aimed to highlight the vital role higher education policies play in raising the efficiency and quality of educational institutions outputs in line with the requirements of sustainable development. Algeria has strived hard to achieve this through the adoption of educational policies that serve students primarily. On the other hand, it was able to achieve what was expected of it because of the huge quantity of outputs of the Algerian university at the expense of quality, completely contrary to the requirements of the labor market in light of the absence of planning for educational needs in Algeria. This accompanied the separation of educational policy from development plans, and therefore education failed to achieve the desired development and is far from achieving the requirements of sustainable development.

Mohamed's study (2015) aimed to identify the sustainable development programs at the University of Sudan for Science and Technology and their role, the obstacles and challenges it faces in achieving sustainable development in Sudan. The study sample consisted of deans, heads of departments, faculty members, and students of the faculties of Sudan University for Science and Technology, as well as members of the civil society. The researcher adopted the descriptive analytical method. The most important results were that the most sustainable development programs in Sudan University are forest science programs, educational programs, and applied research programs; the most important role of the Sudan University for Science and Technology in achieving sustainable development is the graduation of cadres in various disciplines, the rehabilitation of faculty members to work in different stages of education, and conducting lectures and workshops for members of the community and students in the deployment of family and community culture. The most important constraints and challenges to sustainable development in Sudan are poor financial potentials, tribal disputes and wars, and the scarcity of funding sources.

Nussair's study (2015) aimed at exploring the role of higher education in achieving sustainable development from the perspective

of Jerash University students. The population study consisted of all 4209 students of Jerash University. The researcher developed a questionnaire on five scale, with reference to the literature and theoretical studies. The study sample consisted of 253 students, who were chosen randomly in a systematic way. The results revealed that Jerash University education achieves sustainable development at a moderate degree in the areas of community and student service and at the administrative level.

Assaf's study (2015) aimed to identify the degree of appreciation of faculty members of Palestinian universities in Gaza Governorates of the role of empowerment in achieving sustainable development. The researcher used a questionnaire consisting of 28 items covering three areas including professional development, work activation and elevation, and institutional building support. The questionnaire was distributed to 165 faculty members at Al-Azhar University and the Islamic University in Gaza Governorates. The total degree of estimation by the respondents of the role of empowerment in achieving sustainable development was high at a relative weight of 88.97%. The three areas relative weights were as follows: Activation and elevation of work (89.89%), followed by institutional building support (89.41%), and finally professional development (87.39%).

Methodology

Research Design

The researcher used the qualitative approach, where a question was asked to a group of 26 Ph.D. students enrolled in the Doctorate course, Education and Development, at Yarmouk University. The students were asked to write a long response in the form of essays, that it will be used for scientific research purposes. They were asked to explain the reasons for the low rank of education in Jordan at level 70 globally. The development in Jordan is supposed to be commensurate with education, so if Jordan is ranked 70, then it is expected that there will be development in Jordan that is commensurate with the level of education. Based on that, there is a close and strong correlation between development and education. After the students answered the question, the researcher used content

analysis to identify the students' opinions (Stemler, 2001). The researcher relied on the triangulation method, where 3 graduate students were recruited to participate in interpreting and analyzing the data. The results of the analysis were compared to ensure agreement and an appropriate interpretation of what the students answered.

To fill in the research gap, a qualitative approach was chosen because the current study problem requires a deeper understanding and obtaining of deep information and data as described by the members of the study sample. Creswell & Poth (2017) pointed to the importance of qualitative research that includes depth and accuracy in dealing with social phenomena (Ouda and Melkawi, 1992). This approach was also chosen due to its suitability for the title of the current study, obtaining accurate and clear detailed information that suits the topic, as well as achieving the research objectives and answering its questions.

Research Population and Sample

The current research population consists of all students at the faculty of education in the first semester of the academic year 2021-2022. The study sample consisted of all 26 students in the Doctorate course, Education and Development, who had previously approved to write the essays during the first semester of the academic year 2021-2022.

Research Instrument

The researcher used a question as the main instrument to collect the necessary data to answer the research question, due to the lack of previous studies, according to the researcher' knowledge, that used this instrument, its suitability to the objectives and methodology of the study and being the best way to collect data adequately and sufficiently (Abd El-Karim, 2020).

Data Collection Procedure

After selecting the research sample and preparing the research instrument represented in a question, it was applied to the pre-selected sample, specifying the approximate time of the task to around 45-60 minutes, which included one question. Then, the essays were coded and analyzed objectively, and the results were interpreted and linked

to the results of previous research related to the current research topic. Hence, recommendations were made considering the research results.

Research Ethics

Merriam (1998) believes the confidentiality of the data of the study sample should be ensured by following several steps. To achieve this, the participants were provided with a written consent form to ensure their full consent without any pressure, explaining all the details in it. Moreover, a set of measures were taken to maintain the confidentiality of the data in accordance with scientific research ethics, including keeping recordings and data after coding in a confidential, safe, and inaccessible place, not publishing or sharing with others, hiding the participants' information and replacing their names with codes, and ensuring that all essays destroyed after the completion of the current research.

Research Reliability

To achieve the reliability of the research instrument, Abd El-Karim (2020) stated that in qualitative research, the term reliability is used in contrast to quantitative research, where the term consistency is used. He stressed that to achieve reliability, a comprehensive description of the method of collecting data must be provided. The researcher has tried as much as possible to describe in detail the stages of developing the research instrument, its application procedures with the participants, and the method of collecting data.

Also, one of the criteria considered to enhance confidence in the study is confirmatory, also called congruence, which is equivalent to objectivity in quantitative research (Abd El-Karim, 2020). This was what the researcher did by stating direct quotes of the participants' responses in the results of the study to confirm that these results are identical to the data collected from the participants.

Data Analysis

The researcher used the method of objective analysis in analyzing, organizing, classifying the data in specific categories, and interpreting them to find answers to the question of the current research. The content analysis went through several steps: First, organizing the data by coding the responses on Microsoft Word

documents, the data of each participant were saved in a special file and encoded with symbols; first, the written text was reviewed in terms of scientific research ethics to ascertain the integrity of the written text without anything missing; third, classifying the data and putting them in tables and using open coding, where the number of topics in open coding was 15, after reading the data several times, axial coding was used, where the number of topics was 8 written topics, then selective coding was used. Following, the researcher gave clear topics and standardized labels that fit with the data.

In the end, the data were stated, interpreted, analyzed, and linked to previous studies with clarifying the similarities and differences from the participants' perspectives.

Results

Research question: How to explain the low ranking of education in Jordan and in the world human development index?

First Category: Terms of Sustainable Development

Through the results obtained from the students' responses to the open question, the definition of several terms was reached, most notably the concept of development. As seen by the participants, it is an organized effort to develop the community's economic and social resources to catch up with civilization, and provide social, economic, political, and educational life. In addition to being a dynamic process open to all aspects of life through planned, thoughtful, and targeted programs to serve the requirements of society and achieve its well-being.

This was expressed by (F. A.) who defined development as '*The organized effort to develop the economic and social resources of society to catch up with civilization and provide social, economic, political, and educational life*'. In addition to (A. H.), who defined development as '*A dynamic process open to all aspects of life through planned, thoughtful, and targeted programs to serve the society's requirements and achieve prosperity*'. Also, (M. N.) referred to development as '*A process of making change, development, and transition from a low level to a high level in all fields; economic, political, social, and cultural, which reflects positively on the*

individual and society; therefore, it is a thoughtful process with a clear methodology according to clear strategies and plans.

As for sustainable development, the responses of the study sample indicated that it is a process that seeks to upgrade and take advantage of the currently available resources and benefit from them without harming the portion of future generations. It is also a set of radical changes in a particular society to help this society develop itself at a rate that ensures increasing improvement in the lives of its individuals. Besides, it is a term that refers to procedures that seek to bring society to the best status, by environmentally appropriate technology, to achieve a balance between natural resources and human demolition.

The sample's responses varied, where (S. B.) defined sustainable development as *'upgrading and taking advantage of the currently available resources and benefiting from them without harming the share of future generations.* Also, (R. D.) defined it as *'the development that responds to the needs of the present time without endangering the resources of future generations.* Similarly, (Sh. Y.) defined it as *'satisfying individuals' needs without harming the resources for the needs of future generations, as development starts with the human element since it is the core of development'.*

Human development and its growth in addition to its high index are signs of advancement and development in the country, so serious countries seek to advance their development and methods available. To reach this result, it is necessary to take the basic and main pillars of development into consideration, of which the most important is economic development, which is considered the major and obvious indicator of development. Human development is a set of processes that are followed to increase individuals' skills and develop a certain category of society by raising their capabilities and expertise to increase the individuals' efficiency in production, which provides them with employment opportunities and improves the income level as well.

Second Category is: International Organizations Global Indicators to Measure Development in Societies and the Reasons for Jordan's Low Interest in these Indicators.

International organizations have set several indicators to measure the development of societies, level of living, individuals' income, individuals' share of national revenue, health status, provision of services and infrastructure, the most important of which is education. Human development and its growth, and the high index are a sign of advancement and development in the country, so serious countries seek to advance their development and methods available. To reach this result, it is necessary to take the basic and main pillars of development into consideration, of which the most important is economic development that is considered the major and obvious indicator of development. In Jordan, among the global human development indicators, the decline of this indicator is low.

Jordan seeks to achieve these indicators through its interest in implementing the development goals in the society, and it is one of the Arab countries most interested in the subject of development in cooperation with the United Nations, yet this is insufficient compared to other developed countries. However, this interest is low because Jordan is one of the poor countries in its resources, since development must be balanced with economic resources. The low economic level helped in the decline of human development, as it was the reason for the brain drain, the widespread of unemployment, and poverty; there was insufficient attention to people's development of, as the average per capita GNP is extremely low compared with the level of per capita in developed countries.

Among the students' responses indicating the reasons that lead to Jordan's low interest in community development indicators, was the response of (R. D.), who said *'The economic factors such as low income and inability to keep up with fast technology like the rest of the developed world'*, this was confirmed by (N. W.), who pointed out that *'The economic factors and low economic level contributed to the brain drain, the widespread of unemployment, and poverty'*. Also, the most important reasons for the decline in human development as mentioned by (Sh. Y.) was *'The brain drain, the widespread of*

unemployment, and poverty, which affects Jordan's interest in the implementation of community development indicators.'

Based on the above, the reasons for Jordan's low interest in development indicators factors and reasons are related to the current economic situation in Jordan, and the prevailing cultural level, which is related to the human element. Jordan must overcome these reasons, implement the sustainable development plan, and develop strategic programs that enable the exploitation of resources throughout the country. In addition, among the reasons that hinder development are the lack of interest in studies that explain the reasons for the low level of development in Jordan, the disciplines students' study that are not commensurate with the labor market, the political reasons affecting the Arab region and Jordan, and the inadequate resources.

There are reasons for the low level of education in Jordan's universities, which prompted thousands of Jordanians to immigrate abroad to search for the missing. The most important of these reasons is the impunity at public universities as in other universities. This leads to the creation of a lazy and lagging learning environment towards research and deduction among educational cadres, in addition to the lack of a clear sophisticated vision for university presidents to read the developing future, as evidenced by the non-application of laws and legislations related to scientific research and study plans, the lack of expertise and competencies in the field of human development in society, and the lack of knowledge among individuals and managers of the importance of human development, which may be the result of the absence of a training department for individuals in institutions and organizations.

The respondents pointed to several reasons regarding the causes of low level of education in Jordan, as (Kh. Y.) said *'Poor oversight of universities, and the lack of a clear and developed vision of university presidents'*, while (A. R.) said *'The absence of high human resources meetings.'* Meanwhile, (Sh. Y.) said *'The scarcity of competencies and expertise in human development filed in the society, the absence of a training department for individuals in institutions and organizations, the lack of knowledge among individuals and*

managers of the importance of human development, the employers' neglect of the role of human development and their lack of participation in development works, the insufficient support for human development programs in the region or the institution, thus limiting their development, the lack of inter-institutions coordination to support human development programs, the lack of a special department of human resources at companies, the absence of human development discipline in universities, the immigration of competencies and scientists, and the high training costs in many training centers'.

Third Category: Higher Education Relationship to Sustainable Development

The relationship between education and development is a correlation between vulnerability and influence, and each of them is a means of complementing each other. Education, if properly used and directed, contributes to achieving development and maintains its continuity, guidance, and advancement to bring about radical change in the education system of a country. It is necessary to create a broad social base to ensure a minimum level of education for individuals, contribute to the system of values and trends commensurate with the society's developmental aspirations, qualify human resources and prepare them for the labor market in various sectors to achieve integration and balance in development.

Education is also an essential means of development and vice versa, as Jordan's lag is due to the low educational status known as 'education poverty' attributed to several reasons including changing the old curriculum to the modern (new) curriculum in some curricula, such as mathematics, Arabic, English, and science; the decline of the term values in the curricula in activities and lessons; and marginalization of smart students and not tracking them in schools and universities. Poverty is one of the reasons for the migration of minds and brains abroad to seek livelihood; also, the presence of nepotism, favoritism, corruption, and fraud in managerial positions, schools, universities, and other places has caused mismanagement in managerial positions, where the inappropriate person is in the

inappropriate place, while those with competencies, experience, and adequate training are marginalized from leadership positions.

The relationship between education and development is mutual where both are complementary to each other, the human element is the most important component of development, and the way to build a human being is education based on the development and reconstruction of human personality. Economy as an important category has increased the relationship of development with education, where some important theories have emerged, such as the theory of human capital, which is considered as the theoretical framework responsible for the full adoption of the controversial relationship between education and development policies. Also, education aims to modify individuals' behavior and build a good generation reforming its values, since sound education contributes to achieving development and maintains its continuity, and it develops the human element; thus, enabling to achieve sustainable development.

The students' responses on the relationship between education and sustainable development focused on several aspects, where (M. N.) said *'The relationship between education and development is a reciprocal, they are two that are interrelated and complementary to each other, mutual relationship between vulnerability and influence. Education aims to modify individuals' behavior and build a good generation reforming its values, since sound education contributes to achieving development and maintains its continuity, and it develops the human element; thus, enabling to achieve sustainable development'.* Meanwhile (R. A.) said *'The relationship between education and development is very close, since having the right education produces the right development. Education plays a major role in sustainable human development, through the introduction of all modern and sound methods and means in education to achieve the development goals of scientific, cognitive, and intellectual development. It is necessary to introduce modern educational methods, educational curricula, and a teacher capable of participating in sustainable development through education to*

participate in problem solving, interaction, affiliation, democracy, and the direction towards self-development and achieving goals without relying solely on the teacher, whose role lies in guidance and facilitation'.

It is possible to clarify the relationship between education and sustainable development through the following:

- Study content: By integrating critical issues such as climate change, biodiversity, natural disasters, consumption, and production.
- Teaching environment: Education should be designed in an interactive way that focuses on the learner and allows him to explore.
- Teaching strategies: They depend on critical thinking and higher thinking skills.
- Calendar: Conducting continuous evaluation of programs, curricula, and students.
- Globalizing citizens: By participating in effective roles locally, globally, and facing and solving challenges.
- Education outputs: Stimulating learning and enhancing core competencies such as decision-making and taking responsibility.
- Creative thinking: By role-playing and exploring the real world.

Fourth Category: Jordan's Education Index Extremely Low

The ranking of Jordan in the education index is extremely low; although the number of educational institutions, including schools, colleges, universities, and research institutions, is large compared to the population, this indicates an inverse relationship. Logically, the greater the number of educational institutions, the higher the education index and the ranking of the state, but in Jordan it is the other way round. Perhaps this is related to many factors, including:

- Dependency: It is well known in dependency theory that developed countries will not leave an opportunity for developing countries to develop and catch up with them; and in the case of Jordan, we found abstract theoretical curricula, such as Collins curriculum in mathematics and science for grades one through ten.

- Poverty: It is the largest and most influential factor in education, the percentage of poverty, and people living below the poverty line is large, which affects this large segment in continuing and pursuing education.
- Unemployment: Its rates have been rising in Jordan for a long time, especially among those with scientific degrees, which has made Jordan take a low place in the world ranking.
- Labor market: The size of the labor market in Jordan does not fit with the outputs of education, indeed, the curricula and plans in educational institutions should be based on the labor market. There is stagnation in some disciplines, while there is an increasing demand for others.
- Education: although it is compulsory and free in Jordan, it has not reached the required level of progress and development.

This is what (A. Y.) pointed out in her answers, stating *'The change of the old curriculum to the modern curriculum and the decline of the term values in our curricula in activities and lessons, as well as the marginalization of smart students and not tracking them in our schools and universities'*. Meanwhile, (N. W.) said '*Foreign dependency through transferring and borrowing foreign educational systems to developed countries without making amendments or additions to their curricula; thus, this may lead to the collapse of the education system in Jordan, and the design and preparation of curricula that rely on creativity and innovation far from cognitive skills that stuff the minds with information inapplicable to reality, especially university education. The development index has become low for Jordanian universities, due to turning away from their research mission, which directs students to innovation and creativity'*.

Fifth Category: Reasons Restricting Higher Education Institutions in Jordan from Achieving Development Objectives

The global ranking of universities shows the decline of Jordanian universities, which may be attributes to many reasons, including choice of university presidents, universities' failure to renew their study plans, poor financial support for scientific research,

imbalance in the ratio of students' number to the teachers' number, and static study programs.

In addition to these reasons, there are other more precise reasons for this painful decline in the world ranking of Jordanian universities, which are represented in the following: First, the official Jordanian universities do not hold anyone accountable for his scientific or research shortcomings. First, the lack of a clear vision for most university presidents to read the developing future every day, which is evidenced by the lack of developing study plans. Third, non-renewal of the laws for referring to university theses, and licensing of profitable private universities that do not depend on the quality. Fourth, the lack of justice among faculty members in terms of monetary or academic burden. Fifth, the increase in the number of employees' ratio to the number of teaching staff, which makes the university a place to address unemployment at the expense of the scientific research budget. Sixth, the unregulated spread of universities aimed at recruitment. Seventh, the weak requirements for scientific research for promotion purpose of teaching staff compared to Arab countries. Eighth, the absence or poor external funding for scientific research due to lack of confidence in scientific research in our universities.

According to (R. A.), *'The Jordanian official universities do not hold anyone accountable for his scientific or research shortcomings. The lack of a clear vision for most university presidents to read the developing future every day, which is evidenced by the lack of developing study plans, weak scientific research requirements, lack of justice among faculty members, and unregulated spread of universities.'*

Sixth Category: Higher Education Role in Developing Sustainable Development

Education is an indicator of development, and the state's interest in education will affect all its fields in terms of economics, which is based on raising the standards of living, health, and economy; the social field, which seeks to develop the relationship between people, and raise the levels of education, culture, and awareness to achieve freedom and participation; the environmental field, which seeks to

preserve the environment and protect it from pollution, and achieve balance, diversity, continuity, and satisfaction of needs.

Jordan is one of the developing countries, ranked 102 on the Human Development Index. The ranking is based on three criteria, long and healthy life, knowledge, and a decent standard of living (HDI, 2021). Education is influential on development, as it contributes to achieving development and each has an impact on the other. Jordan is one of the countries that suffers from a range of factors that have affected the level of education, including economic, social, political, cognitive, educational, demographic, and others, despite the renaissance and development of Jordan, the prosperity of its civilization, advancement, and elevated status. For example, some developed countries have taken education as a tool to search for development, such as Japan and Germany, which were severely and painfully defeated in World War II, but they were able to reach the highest degrees of economic and technological progress with education, which is considered a powerful and huge weapon in the development of education, economy, and technology.

Education aims at modifying individuals' behavior and building a good and reformed generation for others. Education, if both used and directed well, contributes to achieving development and maintains its continuity, guidance, and progress to bring about a radical change in the education system of a country. Education is a type of social change, through which innovative ideas are used in the social system to increase an individual's income and obtain a better standard of living by means of production and community institutions. The characteristics and features of education is that it is a human work, an individual activity, and is a continuous process that accompanies a person for life; where successful education has a clear vision and mission to implement educational plans and policies that develop thought to create a community culture.

Seventh Category: Challenges and Obstacles Facing Higher Education in Jordan

Among the most important challenges hindering the development process in Jordanian higher education are those

associated with democracy and equal opportunities (universal education), as there is still discrimination between males and females and the level of education between rural and urban areas; quality challenges in the educational system; fusion with the environment as the educational system is required to open up to its society to keep pace with development; and foreign dependence by transferring and borrowing foreign educational systems to developed countries without making amendments or additions to their curricula. Consequently, Jordan's education system may collapse. In addition to designing and preparing curricula that rely on creativity and innovation away from cognitive skills that fill the minds with information that is inapplicable on the ground, especially university education. The development index has become low for Jordanian universities because they have turned away from their research mission, which directs students to innovation and creativity.

In regard of the challenges (N. W.) said *'The challenge of democracy and equal opportunities (universal education); as there is still discrimination between males and females and the level of education between rural and urban areas, as well as the design and preparation of curricula that rely on creativity and innovation away from cognitive skills that fill the minds with information that inapplicable on the ground, especially university education'*.

Among the most important obstacles hindering the development process in the Jordanian higher education are university admission policies, which must be reconsidered; the inadequacy of scientific competencies; the lack of possibilities for the educational process and equipping laboratories and halls for scientific research; low wages and incentives for scientific research; inconsistency of educational curricula with technological and professional development; poor training provided to teachers in order to stimulate creativity in school; absence of a vision towards sustainable development of education in Jordan due to the many changes that have made education decline; immigration of minds due to poverty, low standard of living, and lack of incentives; absence of partnership between the public and private sectors in education and development. This is evidenced by the lack of development of laws, instructions, and legislation in the study plans

and scientific research at some universities; the absence or poor external funding for scientific research due to lack of confidence in scientific research in our universities, all of which is for promotion; the low level of education and cognitive and technical attainment of students due to increased numbers of students compared to the teaching staff; in addition to the scarcity of financial resources allocated to universities, which prompted the development of the parallel program and international programs, causing an increase in the number of students. The high population and the preparation of successful students in general high school led to a high number of students admitted to universities, and consequently, the level of universities declined significantly.

This is confirmed by (M. N.) saying *'Low wages and incentives for scientific research, absence of partnership between the public and private sectors in education and development, poor training provided to teachers to stimulate creativity in school, absence of possibilities for the educational process and equipping of laboratories and halls for scientific research purposes'*.

Eighth Category: Solutions and Proposals to Face the challenges of Developing Sustainable Development

Development has several economic, political, and social forms and has several very necessary goals, and if the individual makes good use of them, the relationship becomes excellent, contributing to a lasting improvement in life. Yet, some challenges and difficulties in achieving this relationship are encountered, including infrastructure, the incapability of these resources, the immigration of competencies, the weak technology and scientific research, and poverty. Thus, if solutions and proposals to address these problems are made, we will have a prosperous development community with high objectives. Such objectives include attracting competencies, exploiting resources, paying attention to scientific research, increasing the resources of other sectors, in addition to paying attention to the sectors of agriculture, education, and health, since they are all interconnected and play a prominent role in creating continuous change, and are a means of civilizational and cultural progress.

These solutions and proposals include:

1. Developing thoughtful scientific plans to face the gap and deal with it seriously.
2. Reviewing the criteria and bases for admission to educational institutions, and not relying totally on the results of high school for admission to higher education.
3. Granting universities academic freedom and adopting a support policy based on performance in management and excellence in scientific research, by setting clear and measurable indicators for all universities.
4. Enacting legislation that promotes technical and vocational learning to bring about change.
5. Paying attention to the preparation and qualification of the teaching staff and training them in the use of technology in education.
6. Paying more attention to the industrial sector and increasing productive factories to attract university graduates to alleviate unemployment and poverty, and paying attention to technical and vocational education so that its outputs are able to stimulate the industrial, economic, and agricultural fields.
7. Increasing government support to universities to improve their infrastructure and facilities, to attract students from abroad and hard currency, support scientific research at Jordanian universities, and establish scientific research centers.
8. Activating the role of Jordanian women and their participation in sustainable development in their society.

The students pointed out several solutions and proposals, for example, (R. M.) said *'Developing thoughtful scientific plans to face the gap and deal with it, reviewing the bases and criteria for admission into educational institutions, granting universities academic freedom, and setting special and clear indicators to measure the field of scientific research in universities'*.

Conclusion

From the above, the researcher believes that there is an urgent need to work on improving higher education in Jordan and providing a sustainable educational environment. The solutions and proposals

put forward by the students indicate the urgent need to develop clear and well-thought-out plans to face the big gap in higher education and deal with it seriously. The criteria and standards for admission to educational institutions should also be reconsidered, universities should be given academic freedom, clear and measurable indicators should be developed, which will allow universities to evaluate their successes in the field of scientific research and create scientific research centers.

The results of the study showed the need to increase government support to prepare and qualify the teaching staff and train them on the use of technology in higher education, as well as increase investment in the industrial sector, and enhance technical and vocational education. In the end, the society in Jordan must cooperate to activate the role of Jordanian women in sustainable development in society and activate their role in participating in building a responsible and sustainable society. The adoption of these solutions and proposals will contribute to improving the quality of higher education in Jordan, and enhance Jordan's contribution to preserving resources and improving the quality of life in society.

Based on this, it can be said that improving higher education in Jordan is one of the most important challenges the society faces. It requires collective efforts to reach sustainable and effective solutions that contribute to achieving the required improvement. The government, society, educational bodies, and students should work together to achieve these goals, by improving the conditions necessary to create a sustainable educational environment. Thereby, restoring confidence in higher education and ensuring improvement of the quality of students' knowledge and skills. Thus, it will be possible to achieve sustainable development and make full use of the country's resources in order to improve the quality of life for all.

Investing in higher education is a strategic and vital investment that can affect Jordan's future and development. Thus, everybody should work together and support the country and its educational institutions, community organizations and individuals to achieve continuous improvement in higher education and create a favorable

learning environment for the students and educational body. Through this, Jordan's strategic goals will be achieved in building an organized and sustainable society that relies on knowledge and innovation in ideas and cutting-edge technologies.

Recommendations

1. Increasing government funding for higher education and setting accurate budgets to improve the structure of universities and educational institutions, as well as technological tools in education.
2. Enhancing the training of the educational and administrative staff and developing their skills in using technology in education.
3. Developing educational programs focused on practical application and enhancing students' practical experiences, in addition to developing academic programs that ensure their qualification for the labor market.
4. Switching to an open and transparent scientific research system, increasing investment in scientific research, and developing innovative research programs.
5. Providing more human, financial, and technological resources for the development of research centers and specialized centers in areas of common interest.
6. Enhancing the role of scientific research in the development of society and improving the quality of life by motivating students, and contributing to research programs and projects.
7. Developing partnerships between educational institutions and other international partnerships, encouraging cultural exchange, and forming strong educational and research links between universities and scientific institutions abroad.
8. The government, society, educational bodies, and students should work together to achieve these recommendations and apply them on the ground, in order to contribute to improving the quality of higher education in Jordan as well as creating a sustainable educational environment.

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