Research Article

Section: Sociology & Development Studies

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The role of colleges of education in achieving sustainable development goals: An overview of Saudi's Vision 2030 from an educational perspective

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Abstract
The current study is based on the idea of achieving SDG 4 (Sustainable Development Goal 4) and its indicators. The Vision of the Kingdom of Saudi Arabia 2030 AD encompasses the Arab and Islamic depth through a vibrant society, a prosperous economy, and an ambitious nation, which emphasized the concepts of sustainable development as its goals in several sections, such as ensuring environmental sustainability, reducing pollution of all kinds, enabling a healthy life, and enhancing identity. Nationalism, the values of justice and transparency, improving equal access to education, developing the digital economy, and other goals were consistent with the concepts of sustainable development, and in response to global trends and recommendations of previous conferences and studies, and given the pivotal role of colleges of education, the current study aimed to reveal the role of colleges of education in Achieving sustainable development goals from an educational perspective (Prince Sattam bin Abdulaziz University as a model), where the study relied on the descriptive analytical approach, data was collected through a questionnaire consisting of (36) statements, divided into three dimensions (the social dimension - the economic dimension - the environmental dimension), it was distributed to a sample of students (501) from the College of Education. The research used SDG 4 (Sustainable Development Goal 4) and it's indicators to ensure that all the SDG 4 goals achieved in due proportion. The results of the study revealed to achieving SDG 4 (Sustainable Development Goal 4) and its indicators from an educational perspective to a high degree in all their social, economic, and environmental dimensions. It is expected that the results of the study will contribute to developing the programs of colleges of education to achieve the goals of sustainable development from an educational perspective. The study developed a set of recommendations for faculty members and those in charge of the educational process at the university to prepare a generation of teacher graduates capable of competing at all levels, drawing their energy from the cultural and Islamic depth of the Kingdom.

Keywords: SDG 4 and its indicators, the role of colleges of education, sustainable development, the Kingdom's Vision 2030, educational perspective

1. Introduction

The current era is witnessing tremendous development and scientific and technological progress in various areas of life. This requires all educational institutions, especially university education, to strive to provide all means so that the learner can keep pace with future challenges and developments. Sustainable development is one of the important foundations in educational and teaching institutions that aim to refine learners' experiences with knowledge, skills and attitudes to raise their level of performance with the aim of developing work, increasing production and improving educational outputs more effectively and considering the needs of the environment.

Based on the Kingdom of Saudi Arabia's Vision 2030, which emphasized the concepts of sustainable development as its goals in a number of Dimensions, such as: ensuring environmental sustainability, reducing pollution of all kinds, enabling a prosperous and healthy life, enhancing national identity and the values of justice and transparency, improving equal opportunities for access to education, developing the digital economy, and other goals that are consistent with the concepts of sustainable development (Saudi Arabia's Vision 2030 Document, 2016), and in response to global trends and recommendations of previous conferences and studies that recommend including the dimensions and concepts of sustainable development in curricula and textbooks.

The 2016 Global Education Monitoring Report confirmed that education is the most important gateway to each dimension of sustainable development, as it provides us with key tools - economic, social, technical and ethical - to adopt and achieve the sustainable development goals. The fourth main goal of sustainable development includes a more ambitious and transformative educational plan. Education is not only a goal in itself; rather, it is a tool to achieve a comprehensive global development plan (UNESCO, 2016). Education and environmental experts at the International Conference on Education for Sustainable Development (2005-2014) concluded that it is necessary to include sustainable development concepts in education curricula, which enables students to acquire knowledge, skills, values and attitudes in the field of environment and sustainable development, and increases their ability to contribute effectively to achieving sustainable development, facing future challenges, and making appropriate decisions at the right time (Al-Banna, 2023; Mahmoodet al., 2020).

In addition, it should be noted that university education is considered an effective force in achieving sustainable development in its various dimensions, as it is responsible for preparing and shaping the behavior of the individual who is able to contribute to its creation and achieving its goals, especially students of the Faculty of Education, as they are the teachers of the future and responsible for preparing future generations of society, and therefore their awareness of the goals of sustainable development must be developed. Therefore, teacher preparation programs in faculties of education must respond to this call, and work to achieve a greater vision for preparing teachers as citizens or future leaders. Studying the problems and solutions related to sustainability is an inevitable necessity to confront them (UNESCO, 2004).

1.1 Research Problem

Sustainable development seeks, through its mechanisms and content, to achieve a better quality of life for the population, enhance their awareness of existing environmental problems, direct them to use resources rationally, achieve technical economic growth, and bring about continuous and appropriate change in the needs and priorities of society. Countries pin their hopes on education to achieve development in its various forms to reach progress and raise the level of their individuals, as man is the focus of development, its tool and its goal. Development is for him and is achieved through him. For him to play his role positively in development, he must be prepared and qualified in a manner consistent with the requirements of sustainable development. This is done by providing him with the opportunity for good education at all its stages, the most important of which is the university education stage.

University education is the main gateway to development, which aims to serve society and

advance it in terms of civilization, advance thought, scientific progress, and the development of human sciences, and prepare people equipped with the foundations of knowledge, advanced research methods, and high values to ensure the progress of the nation and the development of its human wealth by linking university education with the needs of society and production. Accordingly, university education is one of the most important and most dangerous functions of the state, as it is its main tool in providing the country with specialists, technicians, and experts in various fields and sciences. Thus, universities become a stronghold of human thought at its highest levels, and a source for investing and developing the wealth of society, the most valuable of which is human wealth (Ghanem, 2019; Alotaibi & Kumar, 2019).

Anyone who contemplates the global goals referred to by sustainable development will find that they are consistent with the basic principles called for by Islamic law, as many Quranic verses and hadiths guide us to the necessity of preserving life, wealth and honor. Perhaps anyone who contemplates the saying of the Messenger, may God bless him and grant him peace, which was reported on the authority of Abu Hurairah, may God be pleased with him, that the Prophet, may God bless him and his family and grant them peace, said: "Removing harmful things from the road is charity." Narrated by Imam Muslim in his "Sahih." Scholars have stated that what is meant by removing harmful things from the road is: removing anything that harms passersby, such as thorns, cutting trees from rough places, widening roads, and the like (Al-Uthaymeen, 2011). Therefore, it was very important to conduct many studies that demonstrate Islam's interest in the various dimensions of sustainable development.

The mission of colleges of education is not limited to the scientific preparation of student teachers, but rather the most important thing is the educational preparation that qualifies them to carry out their educational mission in the best possible way, instill religious, cultural and social values in their souls, and provide their energy in the service of their communities. A successful university is one that opens its doors to the community and prepares its youth to play their role in bearing responsibility towards the surrounding community (Ajmal & Kumar, 2020; Kumar, 2020). Colleges of education represent houses of expertise entrusted with drawing up clear plans for members of society by preparing a generation of teachers capable of carrying the message of education and enlightenment for students during the various educational stages. Accordingly, the researcher has developed a sense of this research problem, which is represented to reveal the role of colleges of education at Prince Sattam bin Abdulaziz University in achieving the goals of sustainable development according to the Kingdom's Vision 2030 from an Islamic educational perspective.

1.2 Research Objectives

This study focuses on attaining the objectives and indicators of SDG 4 (Sustainable Development Goal 4) and its indicators. It aims to provide a clear conceptual framework on the dimensions of sustainable development (social, economic and environmental), and to identify the role of colleges of education in achieving these goals according to the Kingdom's Vision 2030 from an educational perspective.

1.3 Study questions

Main question: What is the role of colleges of education in achieving the goals of sustainable development according to the Kingdom's Vision 2030 from an educational perspective? The following sub-questions arise:

1. What is the role of colleges of education in achieving sustainable development goals in the social dimension according to the Kingdom's Vision 2030 from an educational perspective?
2. What is the role of colleges of education in achieving sustainable development goals in the economic dimension according to the Kingdom's Vision 2030 from an educational perspective?
3. What is the role of colleges of education in achieving sustainable development goals in the

environmental dimension according to the Kingdom's Vision 2030 from an educational perspective?

1.4 Research Significance

The importance of the current study lies in several considerations; the most important of which are the following:

- The current study addresses a very important topic, which is sustainable development, as sustainable development is a strategic goal for both developed and developing societies as it brings together multiple areas of life.
- This study is a response to the Kingdom's Vision 2030 for sustainable development, which sheds light on the importance of developing university education through optimal investment of available human and material resources to achieve the desired aspirations in the future.
- The current study is a response to the recommendations of many global and local studies, which emphasized the need to conduct more research on the reality of the role played by universities to achieve sustainable development and how to enhance this role.
- Contributing to the vitality of universities in the long term by emphasizing the need to enhance and spread the culture of sustainability in them.
- The results of the current study may benefit those concerned with developing university programs in general, and colleges of education programs in particular considering the goals of sustainable development.
- The current study may benefit students at colleges of education and researchers interested in the topic of sustainable development.

1.5 Limitations of the Study

- The study is objectively limited to identifying the role of colleges of education in achieving sustainable development goals in the social, economic and environmental dimensions according to the Kingdom's Vision 2030 from an educational perspective.
- The study is humanly limited to male and female students at the College of Education in Al-Kharj for the second semester of the academic year 1445 AH.

1.6 Related terminologies

The role

It can be defined as "a set of interconnected behavioral frameworks that achieve what is expected in certain situations, and roles result in the possibility of predicting an individual's behavior in different situations" (Al-Aqab, 2017, 101). The role is also defined as a set of activities, duties, and responsibilities issued by individuals or institutions with the aim of achieving what is expected of these individuals or institutions in a certain situation (Al-Khatib, 2002, 81). The role is also defined as a set of functions or tasks performed by a specific person or institution in a specific interaction situation, and it is a model around which some rights and duties are focused and linked to a specific place within a group or social situation (Al-Rashidi et al., 2017, 324). It can be defined procedurally as a set of activities expected from colleges of education to develop social responsibility among their students, based on interest, understanding, and effective participation by their students in serving the community in a way that achieves sustainable development(Jiang et al., 2022; Ali et al., 2022).

Procedure definition of "role" is: "A set of functions, tasks, and responsibilities expected from colleges of education to achieve the goals of sustainable development in its social, economic, and environmental dimensions among its students according to the Kingdom's Vision 2030 from an educational perspective".

Sustainable Development

Development in language: Money grew, increases. Pigment grows, increases, if it increases in redness and blackness. And the thing grew: it rose from one place to another (Al-Razi, 1979, 479).

Sustainability in language: you say sustain, sustainability, so it is sustainable, and the passive participle is sustainable for the transitive, and the thing is sustained: continued, established and lasted, goodness continued for it, and the person sustained the matter, take his time in it, do not rush your matter and sustain it, and the thing is sustained: requested its continuation, so the dal, waw and mim are one root that indicates stillness and stability, it is said that the thing lasted, if it was still, and the permanent water: the still (Ibn Manzur, 2015; Aslam et al., 2023). Sustainable development is a term: "It is the process of developing the land, cities and societies as well as commercial businesses, provided that they meet the needs of the present without compromising the ability of future generations to meet their needs" (Al-Rawi, 2023, 402).

Sustainable development procedurally: "social, economic and environmental development that enables the needs of current generations to be met, and their well-being achieved, without compromising the ability of future generations to meet their needs, taking into account the challenges of preserving ecosystems and the limited renewable natural resources".

The educational perspective of sustainable development defines from an educational procedural perspective in the current study as: "achieving a balance between economic, social and environmental growth, with a focus on comprehensive human development and achieving human well-being in this world and the hereafter. This philosophy includes promoting faith and moral values in education and developing individual and social capabilities and skills to deal with environmental and economic challenges in a sustainable and responsible manner".

Vision 2030 of Saudi Arabia

Saudi Arabia launched Vision 2030 in 2016, and it has since become the beacon that guides the Kingdom's steps towards the future, and the beating heart of its ambition to achieve social, cultural and economic transformation (Saudi Vision 2030 Document, 2016, 13).

2. Literature Review

Sustainable Development and its Dimensions

Today, the world has realized the importance of sustainable development to obtain the components of present and future life. This was highlighted through successive global conferences that emphasized the need to educate societies about the concepts of sustainable development, the most prominent of which was the United Nations Summit in New York in 2015 - Transforming Our World, the 2030 Sustainable Development Plan, which included (17) goals that included (169) objectives, to represent a wide range of sustainable development goals, with the fourth goal being ensuring quality and inclusive education for all (United Nations Educational, Scientific and Cultural Organization, 2022, 110).

Education is the key to sustainable development; as achieving the sustainable development goals requires developing a strategy; its implementation begins with education, and this was approved by the UNESCO International Conference; Education for Sustainable Development (2005-2014), the conference achieved great success in raising awareness in societies about the importance of education for sustainable development, and the experts in this conference concluded by developing a global work program to achieve the concepts of sustainable development, by focusing on several Dimensions, most notably the inclusion of sustainable development concepts in educational curricula, which enables students to acquire knowledge, skills, values and trends in the field of environment and development, which increases their capabilities to contribute effectively to achieving sustainable development and facing future challenges (Al-Banna, 2023, 296). Figure 1 shows the interactive relationship between the dimensions of sustainable development.
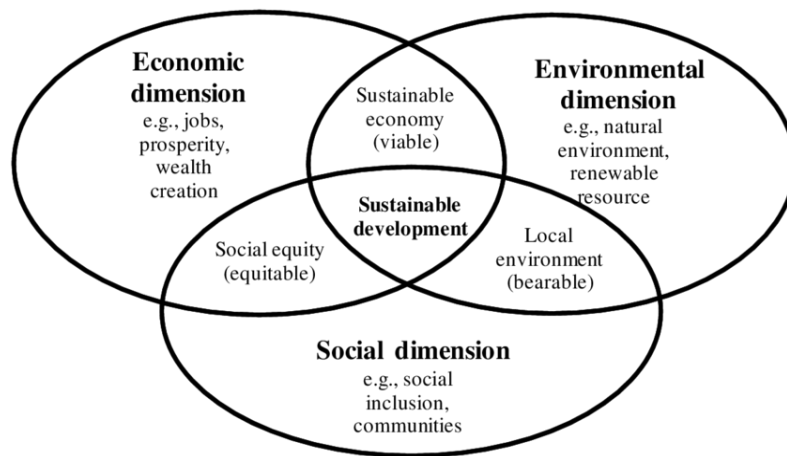
Figure 1. The dimensions of sustainable development (Leat et al., 2011, 608).

Sustainable Development Objectives

Since their adoption at the United Nations Sustainable Development Summit - in New York in September 2015 - the Sustainable Development Goals have been directed towards a better world for all. Thanks to the efforts of the International Telecommunication Union and global cooperation in the field of space science, the world is witnessing tremendous progress in communications technology, and the unique capabilities of liquids have taken the forefront of initiatives related to the Sustainable Development Goals, as they represent an essential tool in monitoring the Earth and addressing climate change (Yalalem et al., 2023; Jad Al-Mawla, 2023). Sustainable development also relied on a set of clear goals based on the general principle of not harming the rights of future generations, by rationalizing the use of natural resources by present generations, including the economic, technical, social and environmental dimensions. To achieve these dimensions and find consensus among them, the United Nations set 17 goals to achieve sustainable development within what are known as the global goals, which came as an alternative, complement and extension of what was achieved from the Millennium Development Goals Program 2000-2015. The Sustainable Development Goals are a global call to action to eradicate poverty, protect the planet and ensure that all people enjoy peace and prosperity. They are interconnected goals, as achieving one goal contributes to achieving other goals, including the following: (United Nations Educational, Scientific and Cultural Organization, 2022, 115)

- Achieving a better quality of life for the population Sustainable development seeks, through planning and implementing development policies, to improve the quality of life of the population in society economically, socially, psychologically and spiritually by focusing on the qualitative aspects of growth rather than the quantitative ones in a fair and democratic manner.
- Respecting the natural environment, as sustainable development focuses on the relationship between the activities of the population and the environment and deals with natural systems as human life and directs that relationship towards integration and harmony.
- Enhancing the awareness of the population of existing environmental problems: This is done by developing their sense of responsibility towards them and urging them to participate actively in finding appropriate solutions for them, through their participation in preparing, implementing, following up and evaluating sustainable development programs and projects.
- Rational exploitation of resources, as sustainable development deals with natural resources as limited resources, therefore preventing their depletion, and works to use and employ them rationally.
- Linking modern technology to what serves the goals of society, and this is achieved by educating the population about the importance of different technologies for the development process, and how to use the available and new ones to improve the quality of life of the community and

achieve its desired goals, without resulting in negative effects on the environment.

There is also another set of sustainable development goals, which are as follows: (Abu Al-Nasr, 2017, pp. 90-91)

- Maintaining a balance between available resources and the basic needs of humans together in the long term, while rationalizing the investment of all resources and setting priorities for the wasteful uses of those resources.
- Achieving economic growth coupled with achieving social and human welfare based on human development as a vital element and the reciprocal and complementary relationships between the population, resources and the environment.
- Achieving more justice for the most deprived or vulnerable groups in society and improving the quality of life and working to empower or empower people while paying attention to both people and their environment and the relationships between them.
- Enhancing individual, collective and societal participation and providing an opportunity for people to participate in a fundamental way in bringing about the desired change in their personality or in the environment or in both.
- Discovering, encouraging and developing human capabilities in societies, enabling them to be creative and able to use technology appropriate to reality.
- Contributing to building institutional capabilities in society so that they are more efficient and effective in directing human resources and activating their participation in the use of financial, material and organizational resources.
- Encouraging the use of clean technology with limited and non-polluting waste, while rationalizing and choosing industrial sites and developing renewable and non-renewable natural resources within a time frame that achieves fair use for the generations of civilization, without ignoring the right of future generations to do so.

Accordingly, sustainable development aims to use new methods in economic and social aspects that help benefit from environmental resources currently without harming the ability of future generations to benefit from them as well. It is development that aims to increase the individual's ability to produce and aims to achieve justice and equality without discrimination or conflict between generations, through interest in developing human resources and empowering them in a way that makes the individual the means and the goal of development itself. Figure 2 shows a summary of the goals of sustainable development (Abu Al-Nasr, 2017, p. 87).

Figure 2. Essential Elements for Delivering the Sustainable Development Goals (Rahman et al., 2019, p. 5).

Characteristics of Sustainable Development

Sustainable development is uniquely characterized by a set of features, summarized in the following points (Mahmoud, 2022, p. 251):

- Sustainable development is highly interventionist and complex, particularly in natural and social aspects. It also has a spiritual and cultural dimension linked to preserving the civilizational identity of societies.
- Sustainable development primarily aims to meet the needs and demands of the most impoverished segments of society. It seeks to alleviate global poverty by achieving a balance among the three pillars of environment, economy, and society to ensure social welfare.
- Its elements cannot be separated, nor can its indicators be measured independently, due to the integration of quantitative and qualitative dimensions within it.
- Sustainable development is based on the principle of justice between individuals, generations, and nations.

The Implications of Sustainable Development from an Educational Perspective

God Almighty created the universe in the best and most complete form, endowing it with cosmic laws and causes to preserve it. Among these causes are verses in the Quran that address the concept of sustainable development, covering topics related to humans and their daily lives, as well as issues related to environmental sustainability and renewable energy.

The key implications of sustainable development from an educational perspective can be summarized as follows (Mustafa, 2022, p. 899):

- Although the concept of sustainable development is modern, its principles have been deeply rooted in the history of Islamic law since ancient times.
- Emphasizing the importance of the environment and working to preserve and maintain it, as well as keeping it balanced to remain a suitable habitat for life.
- Utilizing the earth's resources and wealth according to specific guidelines, avoiding both excess and neglect.
- Humans are stewards, not owners, of the environment and its resources; therefore, they cannot act upon it according to personal desires without restrictions. Humans are trustees of these environmental resources, as they are also entrusted with themselves, belonging ultimately to their Creator.
- As stewards of their surroundings, humans are responsible for maintaining and protecting their environment from any destruction or harm. Islam prohibits any form of damage, whether it affects humans or other creatures.
- The environment, with its natural resources, is not considered the exclusive property of any single generation to use as it pleases; rather, it is a legacy for all of humanity, and no generation can claim exclusive ownership of this right.
- Achieving the dimensions of sustainable development requires fundamental changes in economic and social systems. This transformation should not be left to governments alone but also involves activating civil society, including non-governmental organizations and human rights groups, in a structured, cooperative, and consultative framework.

Reflecting on the Quran, one finds conclusive evidence of the explicit implications of the concept of sustainable development, including the following:

- Perfection of Work and Economic Growth: Allah says: "It is He who made the earth tame for you—so walk among its slopes and eat of His provision—and to Him is the resurrection." (Al-Mulk, 15). Allah has made the earth subservient to humanity, granting every person the freedom

to choose suitable work based on their abilities, skills, and qualifications.

- Eradicating Poverty: Allah says: "Righteousness is not that you turn your faces toward the east or the west, but [true] righteousness is in one who believes in Allah, the Last Day, the Angels, the Book, and the Prophets and gives his wealth, in spite of love for it, to relatives, orphans, the needy, the traveler, those who ask [for help], and for freeing slaves; [and who] establishes prayer and gives zakat; [those who] fulfill their promise when they promise; and [those who] are patient in poverty and hardship and during battle. Those are the ones who have been true, and it is those who are the righteous." (Al-Baqarah, 177). This verse emphasizes the value of solidarity among Muslims, highlighting true righteousness through giving zakat and charity to those in need.
- Establishing Peace and Justice among People: Allah says: "And the heaven He raised and imposed the balance, that you do not transgress within the balance. And establish weight in justice and do not make deficient the balance. And the earth He laid [out] for the creatures. In it are fruit and palm trees having sheaths [of dates] and grain having husks and scented plants. So, which of the favors of your Lord would you deny?" (Ar-Rahman, 7-13).
- The Importance of Knowledge and Quality Education: Allah says: "Recite in the name of your Lord who created—created man from a clinging substance. Recite, and your Lord is the most Generous—who taught by the pen—taught man that which he knew not." (Al-Alaq, 1-5).

There are many educational and Islamic implications of sustainable development in Islam, which should be instilled in students at education colleges so they can embed these values in future generations.

Previous studies

Al-Rawi's (2023) study aimed to uncover the Quranic guidance on sustainable development and its role in human construction, the development of the earth, and the preservation of resources, which are sources of human strength. The Holy Quran contains numerous verses that discuss sustainable development, some of which relate directly to the individual, while others address environmental sustainability and renewable energies. These directives are in line with what was endorsed by the United Nations General Assembly in 2015. The study seeks to provide an Islamic foundation for the concept of sustainable development from the Quran, highlighting its significance in Islam, using a thematic approach, interpreting verses, and explaining God's intent by referring to the words of renowned interpreters. It also examines the extent to which Islam supports sustainability concepts and their applications for individuals and society, responds to skeptics about the relevance of this religion for all times and places, and explores the role of sustainable development in human construction, progress, and prosperity.

Al-Sawy's (2023) study aimed to assess the effectiveness of a program based on sustainable development dimensions in raising awareness of climate change and future thinking among student teachers in the social studies department at the College of Education. The research materials included a list of sustainable development dimensions suitable for social studies student teachers, a list of future thinking skills, and a guide for a training program based on sustainable development dimensions. The measurement tools included a climate change awareness scale and a future thinking test. The research group consisted of one experimental group of 35 second-year students in the social studies department. The results indicated the effectiveness of the program based on sustainable development dimensions in enhancing climate change awareness and future thinking among social studies student teachers at the College of Education.

Banna's (2023) study sought to diagnose the current state of the College of Education at Benha University, one of Egypt's education colleges, and its role in preparing leading teachers for environmental sustainability. Based on the field study results, which highlighted shortcomings in the college's teacher preparation programs that hinder it from preparing leading teachers for environmental sustainability, the study proposed a model to enhance the role of the College of Education at Benha University in

preparing leading teachers for environmental sustainability.

Gad El-Moula's (2023) study aimed to develop science curricula in line with the sustainable development goals of Egypt's Vision 2030 and its associated space technology applications, with the objective of fostering future thinking skills and social responsibility among middle school students. The study sample consisted of 65 first-year middle school students in Dakahlia Governorate. The results revealed that middle school science textbooks inadequately address some of the sustainable development goals in Egypt's Vision 2030 and the associated space technology applications. Additionally, the study found that the developed curriculum effectively enhanced future thinking skills and social responsibility among the students.

Zahran's (2023) study aimed to investigate the role of university leadership at Fayoum University in achieving sustainable development goals considering Egypt's Education Vision 2030. The study adopted a descriptive methodology, and one of its key findings was that several obstacles hinder the improvement of university leadership performance in achieving sustainable development goals based on Egypt's Education Vision 2030, specifically regarding environmental, social, and economic dimensions. These obstacles include the lack of a mechanism for communication with scientific and global research centers to stay updated on the latest developments in the environmental field and insufficient focus on forming research teams to study social issues and provide solutions.

Mustafa's study (2022) highlighted sustainable development, its dimensions, goals, and the basis for these dimensions and goals from the perspective of Islamic law, which is founded on achieving the welfare of people in both worldly and spiritual matters. It aims to draw the attention of concerned Muslim jurists and economists to the need for a religious foundation for this important issue, deriving the relevant legal rulings from religious texts, and emphasizing that Islamic law was ahead of any secular theory in this field. It asserts that the religious drive for Muslims should be the true motivation for their environmental protection, adoption of sustainable development programs, and reinforcement of Islamic principles.

Mahmoud's study (2022) aimed to shed light on the theoretical foundations of sustainable development, analyze social responsibility, and clarify the role of colleges of education in developing social responsibility among students through its three elements: concern, understanding, and participation, to enhance the social role of students in contributing to sustainable development. The study also presented a future vision to improve the role of colleges of education in fostering social responsibility among students, detailing the dimensions of this vision and its implementation mechanisms. The study used a descriptive approach along with the Delphi method for future studies. The sample consisted of 23 experts from colleges of education. The study identified 71 roles for colleges of education in developing social responsibility through the elements of concern, understanding, and participation. It also identified several obstacles that colleges of education face in promoting social responsibility among students to achieve sustainable development, with the most significant being limited resources and capabilities needed to implement social responsibility programs, a lack of social responsibility culture among some students, and a shortage of incentives and rewards.

Al-Barawi's study (2021) aimed to explore the role of the university in achieving sustainable development goals. The research used a descriptive approach and consisted of two main parts. The first covered the conceptual and intellectual framework of sustainable development, including its economic, social, human, environmental, and social-technological dimensions, as well as the principles of sustainable development, such as productivity, equality, sustainability, and empowerment. It also discussed the dimensions of sustainable development: economic, social-human, environmental, and technological, along with sustainable development goals, Egypt's Vision for Sustainable Development (2030), challenges to sustainable development, and the requirements to achieve it. The second part highlighted the role of the university in achieving sustainable development goals, addressing global interest in the university's role in sustainable development, the university's role in achieving sustainable

development, obstacles to the university's role, and the requirements to enhance the university's contribution to sustainable development goals.

Sharabi's study (2020) aimed to clarify the concept of intellectual security as a requirement for sustainable development, its importance for the stability of nations and their advancement, and to examine the cultural reality of universities and their capacity to confront ideological currents, as perceived by faculty members at Prince Sattam bin Abdulaziz University. The researcher used a descriptive approach. The results indicated that the overall role of universities in achieving intellectual security was rated as moderate.

Aqili's study (2020) aimed to determine the extent to which sustainable development concepts are included in high school computer science and information technology textbooks in Saudi Arabia by creating a list of sustainable development concepts that should be integrated into the textbook content. To achieve this goal, the researcher used a descriptive analytical method, building a list of sustainable development concepts encompassing social, economic, and environmental dimensions. The study found an imbalance in the percentage distribution of sustainable development dimensions within the textbook content. Based on the findings, the researcher provided several recommendations, most notably the need to balance the integration of sustainable development dimensions in the Computer Science and Information Technology textbook (2) and suggested that education experts and curriculum developers utilize the current study's findings to incorporate sustainable development concepts in computer science and information technology textbooks specifically, and in other textbooks generally.

Al-Sheiti's study (2020) aimed to examine the role of Saudi universities in aligning higher education outcomes with the requirements of sustainable development according to Saudi Arabia's Vision 2030, from the perspective of administrative leadership at Qassim University. The study population consisted of administrative leaders at the university, with a sample of 80 faculty members from the administrative leadership selected purposefully. A questionnaire with four themes was prepared. The study's results showed that most of the sample agreed on several aspects, including the quality level of graduates, the quality of training programs offered to community institutions, and the scientific consultations, research projects, seminars, and conferences provided by the university that align with the state's sustainable development plans and Vision 2030. However, the study also identified challenges facing Qassim University in enhancing the skills and abilities of graduates to prepare them for the job market. All participants agreed on the moderate role Saudi universities could play in achieving quality educational outcomes that meet the requirements of sustainable development in the Kingdom in line with Vision 2030.

Gerio et al.'s study (2020) aimed to identify the role of universities in achieving sustainable development, focusing on the University of Tor Vergata in Rome, Italy. The study adopted a case study approach, providing an analytical description of the university's commitment to sustainability. The university pursued sustainability through two approaches: the first focused on teaching and educational preparation of students, not only at the level of curricula but also through various training courses to raise students' awareness. The second approach directed scientific research and creative projects towards sustainability.

Kopnina's study (2020) presented a different perspective on the sustainable development goals promoted by UNESCO, highlighting some concerning trends and contradictions. This educational approach is based on the broader objective of sustainable development, which often emphasizes economic measures related to poverty alleviation and health improvement but does little to curb consumer growth. While sustainable development and its goals tend to prioritize environmental education, there is little critical discussion around education that emphasizes environmental safety for the future of both humans and non-humans. The study also points out a genuine disregard for the rights of certain populations and ethnicities, which sustainable development should advocate for universally, across all times and places.

Eid's study (2019) aimed to explore the role of student activities in achieving certain sustainable

development goals at Egyptian universities from students' perspectives. The study presented a conceptual framework, including definitions of student activities and sustainable development. Using a descriptive approach, the research tool was a questionnaire administered to a stratified random sample of 372 students from Fayoum University, covering colleges of education, arts, agriculture, engineering, and tourism and hotels between March 17 and 28, 2019. The results showed no statistically significant differences among the responses of participants from different colleges. The study concluded with proposed mechanisms to enhance the role of student activities at Fayoum University in achieving some sustainable development goals, including building a sustainable social infrastructure for campus management and incorporating practical aspects of scientific materials into student activities through a methodology coordinated between activity organizers and other departments.

Agbedahin's study (2019) aimed to provide an overview of the results of a comprehensive historical literature review on the development of global policies and processes related to the emergence, effectiveness, and significance of sustainable development, Education for Sustainable Development (ESD), and the 2030 Sustainable Development Agenda. The study placed significant emphasis on the importance of environmental education and its relationship with sustainable development. The paper analyzed the critical connection between education, sustainable development, ESD, sustainable development goals, and human development. Additionally, the study highlighted the central role of ESD in global education discourse, emphasizing the link between education and its role in achieving all sustainable development goals.

Tiana et al.'s study (2018) aimed to assess the implementation of sustainable development goals at the higher education level in curricula at the University of Catalonia in Spain. The study involved personal interviews with faculty members and deans from eight diverse colleges within the university, ranging from practical to theoretical disciplines. The study used open interviews, including questions aimed at understanding the actions taken by university colleges to implement sustainability policies and goals. The study found that the university colleges were keen on incorporating sustainable development into their vision and mission, although they varied in the extent to which they practiced sustainable development goals in their curricula. The study also highlighted some challenges facing the colleges, including implementing sustainability-focused curricula, issues related to faculty members, and students' understanding of these curricula.

Nasr's study (2017) aimed to determine the expected roles of universities in meeting the requirements of implementing Egypt's Sustainable Development Strategy 2030. The study identified a set of general requirements for implementing the strategy, with some of these falling under the direct responsibility of higher education institutions. Among these requirements were the roles of universities in raising awareness of the Sustainable Development Strategy Egypt 2030, translating the national strategy into a higher education strategy, planning for the national strategy, cooperating and exchanging expertise in strategy implementation, providing funding sources for the strategic plan, promoting good governance, and researching the elements of the strategic plan.

Mohamed's study (2015) aimed to examine sustainable development programs at Sudan University of Science and Technology, their role, and the challenges and obstacles they face in achieving sustainable development in Sudan. The study sample included deans, department heads, faculty members, students from the university, and members of civil society, totaling 300 participants. The researcher employed a descriptive analytical approach using a questionnaire to collect data. The study found that the most prominent sustainable development programs at Sudan University of Science and Technology that aim to achieve development in Sudan include forestry sciences programs, educational programs, and applied research programs. The university's primary role in achieving sustainable development is to graduate qualified individuals in various fields, prepare teachers for different education levels, and organize lectures and workshops for the community and students to promote family and community culture. The main challenges to sustainable development in Sudan include financial limitations, tribal

conflicts and wars, and limited funding sources.

Vagnoni and Cavicchi's exploratory study (2015) aimed to evaluate the practice of sustainable development by Italian public universities, identifying strengths and weaknesses. The study adopted a qualitative analysis approach and highlighted the importance of the role of universities in achieving sustainable development. However, the study noted several constraints hindering universities in this regard, such as financial constraints, a lack of integration between university activities for sustainable development, and insufficient resources for implementing sustainability programs and creating new specializations.

Sammalisto et al.'s study (2014) aimed to assess the implementation of sustainable development at Swedish universities from the perspective of faculty and staff members. The study used a case study approach and found that faculty members play a crucial role in achieving sustainable development by raising sustainability awareness among university students and integrating sustainability issues into education. The study highlighted the need to provide more opportunities for training faculty members and staff on sustainable development and related concepts.

3. Designs/Methods/Findings/Results

The current study employed a mixed-methods approach, which is a method of collecting, analyzing, and combining quantitative and qualitative data within a single study to understand a research problem (Creswell, 2014). It combines descriptive and qualitative analytical methodologies to explore the role of colleges of education in achieving the Sustainable Development Goals according to Saudi Vision 2030 from an educational perspective, as perceived by students enrolled in the College of Education during the second semester of the academic year 1445 AH.

Study Population

The study population consisted of students from the College of Education at Prince Sattam bin Abdulaziz University, totaling 746 male and female students in the second semester of the academic year 1445 AH.

Study Sample

The study sample size was determined through simple random sampling, based on the characteristics identified for the target population of students from the College of Education at Prince Sattam bin Abdulaziz University, resulting in 501 male and female students.

Study Instrument

The study instrument (questionnaire) was developed in its final form, consisted of 36 items after statistical adjustments. These items were distributed across three main dimensions, as shown in Table 1, which outlines the number of questionnaire items and their distribution across the dimensions.

Table 1. Questionnaire Dimensions and Items

	Questionnaire Dimensions	Number of items
First	The Role of Colleges of Education in Achieving Sustainable Development Goals in the Social Dimension from an Educational Perspective.	12
Second	The Role of Colleges of Education in Achieving Sustainable Development Goals in the Economic Dimension from an Educational Perspective.	12
Third	The Role of Colleges of Education in Achieving Sustainable Development Goals in the Environmental Dimension from an Educational Perspective.	12
	Total	36

A three-point Likert scale was used to gather responses from the study sample, with the following levels of agreement: High, Moderate, and Low. This scale was quantified by assigning each level a specific

score as follows: High = 3 points, Moderate = 2 points, and Low = 1 point. To determine the range of the three-point Likert scale categories, the range was calculated by subtracting the minimum value from the maximum (3 - 1 = 2), then dividing by the highest value on the scale (2 ÷ 3 = 0.66). This value was then added to the minimum value on the scale (1) to set the upper limit for this category. The resulting range of categories is shown in Table 2.

Table 2. Classification of Five-Point Likert Scale Categories (Response Mean Limits)

Degree of verification	Class limits	
	From	To
High	2.34	3
Medium	1.67	2.33
Low	1.00	1.66

The range length was used to obtain an objective assessment of the item averages based on the responses of the study sample after statistical processing.

Validity and Reliability of the Study Instrument
To determine the validity and reliability of the study instrument, it was applied to a pilot sample of (46) students, separate from the primary sample. This pilot sample was drawn from the current study population. Internal consistency was used as an indicator of instrument validity, alongside expert validity. Cronbach's Alpha coefficient was employed as an indicator of the instrument's reliability, as detailed below:

Internal Consistency Validity of the Study Instrument
To verify the internal consistency validity of the questionnaire, Pearson's Correlation Coefficient was calculated to determine the correlation of each item in the questionnaire with the overall score of the dimension to which the item belongs. Table 3 shows the correlation coefficients for each dimension and their respective items.

Table 3. Pearson Correlation Coefficients for the questionnaire items

Item	Correlation Coefficient with dimension	Item	Correlation Coefficient with dimension
The first dimension: The role of colleges of education in achieving the goals of sustainable development in the social dimension from an educational perspective			
1	0.776	7	0.808
2	0.748	8	0.762
3	0.782	9	0.813
4	0.808	10	0.663
5	0.795	11	0.778
6	0.731	12	0.774
The second dimension: The role of colleges of education in achieving sustainable development goals in the economic dimension from an educational perspective			
1	0.823	7	0.894
2	0.797	8	0.8
3	0.88	9	0.874
4	0.791	10	0.856

5	0.856	11	0.813
6	0.854	12	0.856
The third dimension: The role of colleges of education in achieving sustainable development goals in the environmental dimension from an educational perspective			
1	0.836	7	0.848
2	0.808	8	0.86
3	0.855	9	0.864
4	0.861	10	0.809
5	0.849	11	0.777
6	0.879	12	0.826

Pearson's correlation coefficients were calculated between the dimension scores and the total score on the questionnaire after deleting the dimension score from the total score of the questionnaire, as shown in Table 4.

Table 4. Pearson correlation coefficients between the dimensions scores and the total score on the questionnaire

Dimensions		correlation coefficient
First	The role of colleges of education in achieving sustainable development goals in the social dimension from an educational perspective	0.924
Second	The role of colleges of education in achieving sustainable development goals in the economic dimension from an educational perspective	0.854
Third	The role of colleges of education in achieving sustainable development goals in the environmental dimension from an educational perspective	0.865

It is clear from Tables (3, 4) that the values of the correlation coefficient of each statement with its Dimension are positive and statistically significant at the significance level (0.01) or less, which indicates the validity of the internal consistency between the questionnaire items and the total score for each dimension, and their suitability for measuring what they were prepared to measure.

Stability of the study instrument
The stability of the questionnaire was confirmed by using Cronbach's Alpha (α). Table 5 shows the values of Cronbach's Alpha stability coefficients for each dimension of the questionnaire.

Table 5. Cronbach's alpha coefficient to measure the stability of the study instrument

Questionnaire dimensions		Number of items	Reliability coefficient (Cronbach's alpha)
First	The role of colleges of education in achieving sustainable development goals in the social dimension from an educational perspective	12	0.947
Second	The role of colleges of education in achieving sustainable development goals in the economic dimension from an educational perspective	12	0.938

Third	The role of colleges of education in achieving sustainable development goals in the environmental dimension from an educational perspective	12	0.968
Overall reliability (questionnaire as a whole)		36	0.982

Table 5 shows that the general stability coefficient is high, reaching (0.982), which indicates that the questionnaire has a high degree of stability that can be relied upon in the field application of the study.

Statistical methods used to process the study data

To achieve the study objectives and analyze the data collected, many appropriate statistical methods were used using the Statistical Package for Social Sciences, abbreviated as (SPSS 24.0), where the following statistical measures were calculated:

- **Frequencies (F) and percentages (%)**: to identify the characteristics of the study sample individuals and determine their responses to the main dimension's phrases included in the study tool.
- **Weighted Mean**: to identify the average responses of the study sample individuals to each of the dimension's phrases, and it is also useful in arranging the items according to the highest weighted arithmetic mean.
- **Mean (M)**: to know the extent of the increase or decrease in the responses of the study sample members regarding the main dimensions, knowing that it is useful in arranging the dimensions according to the highest arithmetic mean.
- **Standard Deviation (SD)**: to know the extent of the deviation of the responses of the study sample members for each item of the study variables, and for each of the main dimensions from their arithmetic mean.

4. Results

The main question of the study: *What is the role of colleges of education in achieving the goals of sustainable development according to the Kingdom's Vision 2030 from an educational perspective?*

To answer this main question, mean and standard deviation of these dimensions were calculated to arrive at the role of the university in achieving the goals of sustainable development among students, table 6 shows this.

Table 6. Responses of the participants to the role of colleges of education in achieving the goals of sustainable development (n = 501)

	البعد	M	SD	Rank	Achieving degree
1	The role of colleges of education in achieving sustainable development goals in the social dimension from an educational perspective	2.48	0.480	1	High
2	The role of colleges of education in achieving sustainable development goals in the economic dimension from an educational perspective	2.41	0.555	3	High
3	The role of colleges of education in achieving sustainable development goals in the environmental dimension from an educational perspective	2.42	0.546	2	High
	The role of colleges of education in achieving sustainable development goals according to the Kingdom's Vision 2030 from an educational perspective	2.44	0.507		High

Table 6 shows that the students participating in the study agree that colleges of education achieve sustainable development goals to a high degree, with an arithmetic mean of (2.44 out of 3) and a standard deviation of (0.507). The dimension (the role of colleges of education in achieving sustainable development goals in the social dimension from an educational perspective) came in first place with an arithmetic mean of (2.48 out of 3) and a (high) achievement degree. The dimension (the role of colleges of education in achieving sustainable development goals in the environmental dimension from an educational perspective) came in second place with an arithmetic mean of (2.42 out of 3) and a (high) achievement degree. The dimension (the role of colleges of education in achieving sustainable development goals in the economic dimension from an educational perspective) came in third place with an arithmetic mean of (2.41) and a (high) achievement degree.

Answer to the first question: *What is the role of colleges of education in achieving the goals of sustainable development in the social dimension from an educational perspective?*

To identify the role of colleges of education in achieving the goals of sustainable development in the social dimension from an educational perspective, the frequencies, percentages, arithmetic means, standard deviations, and ranks were calculated for the responses of the study sample members to the dimension items according to the results shown in Table (7).

Table 7. Participants' responses related to the role of colleges of education in achieving the goals of sustainable development in the social dimension from an educational perspective (n = 501 male and female students)

Items			Achieving degree			M	SD	Achieving degree	Rank
			Rarely	Always	Sometimes				
1	The college holds workshops or training courses related to community issues from an educational perspective	F	36	210	255	2.44	0.625	High	7
		%	7.2	41.9	50.9				
2	The college is keen to implement moral education programs, such as: cooperation, honesty, trustworthiness, and integrity	F	36	172	293	2.51	0.628	High	4
		%	7.2	34.3	58.5				
3	The college holds meetings with the local community to honor the owners of pioneering community initiatives in the field of sustainable development	F	55	197	249	2.39	0.677	High	11
		%	11.0	39.3	49.7				
4	The objectives of university courses in some specializations include the principles of community sustainable development	F	25	215	261	2.47	0.591	High	5
		%	5.0	42.9	52.1				
5	Some university courses include study topics on social responsibility	F	24	194	283	2.52	0.588	High	3
		%	4.8	38.7	56.5				

6	Some courses contribute to instilling Islamic values related to organizing social relations between members of society	F	16	153	332	2.63	0.545	High	2
		%	3.2	30.5	66.3				
7	Faculty members in some specializations present and discuss the most important community issues	F	38	194	269	2.46	0.633	High	6
		%	7.6	38.7	53.7				
8	Students are assigned procedural research to address community issues and problems from an educational perspective	F	47	205	249	2.40	0.655	High	10
		%	9.4	40.9	49.7				
9	Student activities at the college allow me to express my thoughts on community issues	F	50	204	247	2.39	0.663	High	12
		%	10.0	40.7	49.3				
10	Students participate in some social events such as: World Teachers' Day, National Day, and Foundation Day	F	14	139	348	2.67	0.528	High	1
		%	2.8	27.7	69.5				
11	Events and activities are held at the college to discuss the Kingdom's Vision 2030 related to an ambitious Saudi society	F	51	188	262	2.42	0.670	High	9
		%	10.2	37.5	52.3				
12	Students participate in making some decisions related to the Bill of Rights and Duties	F	48	183	270	2.44	0.663	High	8
		%	9.6	36.5	53.9				
Weighted Mean						2.48	0.480	High	

Table 7 shows that the students participating in the study agree that the colleges of education achieve the goals of sustainable development in the social dimension from an educational perspective to a high degree, with M (2.48 out of 3) and a SD (0.480). All the items in this dimension were achieved to a high degree, as the item "students participate in some social occasions such as: World Teachers' Day, National Day, Foundation Day" came in first place with M (2.67 out of 3) and SD (0.528). The item "some courses contribute to instilling Islamic values related to organizing social relations between members of society" came in second place with M (2.63 out of 3) and SD (0.545). The item "some university courses include study topics on social responsibility" came in third place with M (2.52) and SD (0.588). While the item "Student activities at the college allow me to express my ideas about societal issues" came in last place with a high degree of verification, M (2.39) and SD (0.663).

Answer to the second question: *What is the role of colleges of education in achieving sustainable development goals in the economic dimension according to the Kingdom's Vision 2030 from an educational perspective?*

Table 8. Participants' responses related to the role of colleges of education in achieving the goals of sustainable development in the economic dimension from an educational perspective (n = 501 male and female students)

Items	Achieving degree			M	SD	Achieving degree	Rank
Rarely Sometimes	Always						

1	The college organizes training courses on entrepreneurship and small business management	F	49	187	265	2.43	0.665	High	5
		%	9.8	37.3	52.9				
2	The college encourages its students to manage some campus projects	F	36	192	273	2.47	0.628	High	3
		%	7.2	38.3	54.5				
3	The college surveys the opinions of community institutions to know the level of graduates and their suitability for the requirements of the labor market	F	60	201	240	2.36	0.686	High	11
		%	12.0	40.1	47.9				
4	Faculty members encourage students to attend local and international seminars and conferences on sustainable development in the field of economics	F	37	189	275	2.48	0.631	High	2
		%	7.4	37.7	54.9				
5	Faculty members discuss with students some issues related to sustainable economic development, such as: the digital economy, or e-commerce	F	66	197	238	2.34	0.700	High	12
		%	13.2	39.3	47.5				
6	University courses include study topics on the most important contents of Islamic economics	F	44	191	266	2.44	0.651	High	4
		%	8.8	38.1	53.1				
7	University courses include enrichment activities on the concept of education economics, and how to apply it in classrooms	F	43	212	246	2.41	0.643	High	6
		%	8.6	42.3	49.1				
8	Student activities enhance the concepts of sustainable development, such as: volunteer work, participation in global bodies in the field of education	F	33	180	288	2.51	0.618	High	1
		%	6.6	35.9	57.5				
9	Students are assigned to conduct procedural research in some schools to achieve the Kingdom's 2030 vision in providing a prosperous economy	F	59	195	247	2.38	0.686	High	9
		%	11.8	38.9	49.3				
10	Students participate in some economic events such as: the World Economic Forum	F	61	192	248	2.37	0.692	High	10
		%	12.2	38.3	49.5				
11	Students are urged to use modern technologies to achieve sustainable development in the field of education	F	47	200	254	2.41	0.656	High	7
		%	9.4	39.9	50.7				
12	Students are provided with skills to invest environmental resources to achieve distinguished education at the lowest possible cost	F	48	206	247	2.40	0.657	High	8
		%	9.6	41.1	49.3				
Weighted Mean						2.42	0.555	**High**	

Table 8 shows that the students participating in the study agree that the colleges of education achieve the goals of sustainable development in the economic dimension from an educational perspective to a high degree, with M (2.42 out of 3) and SD (0.555). All the items in this dimension were achieved to a high degree, as the item "Student activities enhance the concepts of sustainable development, such as: volunteer work, participation in global bodies in the field of education" came in first place with M (2.51 out of 3) and SD (0.618). The item "Faculty members encourage students to attend local and international seminars and conferences in sustainable development in the field of economics" came in second place with M (2.48 out of 3) and SD (0.631). The item "The college encourages its students to manage some campus projects" came in third place with M (2.47 out of 3) and SD (0.628). While the term "Faculty members discuss with students some issues related to sustainable economic development, such as: the digital economy, or e-commerce" came in last place with a high verification degree and M

(2.34 out of 3) and SD (0.700).

Answer to the third question: *What is the role of colleges of education in achieving sustainable development goals in the environmental dimension according to the Kingdom's Vision 2030 from an educational perspective?*

Table 9. Participants' responses related to the role of colleges of education in achieving the goals of sustainable development in the environmental dimension from an educational perspective (n = 501 male and female students)

	Items		Achieving degree			M	SD	Achieving degree	Rank
	Rarely Sometimes		Always						
1	The college holds workshops or training courses related to environmental issues	F	40	201	260	2.44	0.638	High	3
		%	8.0	40.1	51.9				
2	The college library has various sources of books and magazines on issues of sustainable environmental development	F	41	203	257	2.43	0.640	High	6
		%	8.2	40.5	51.3				
3	The objectives of university courses in some specializations include spreading environmental awareness	F	45	192	264	2.44	0.653	High	4
		%	9.0	38.3	52.7				
4	Some university courses include sufficient knowledge about environmental pollution and its risks	F	49	197	255	2.41	0.662	High	9
		%	9.8	39.3	50.9				
5	Some university courses contribute to instilling Islamic values related to sustainable environmental development	F	33	203	265	2.46	0.617	High	2
		%	6.6	40.5	52.9				
6	Some faculty members educate students about the concepts and contents of sustainable environmental development	F	48	191	262	2.43	0.661	High	7
		%	9.6	38.1	52.3				
7	Students are assigned procedural research on issues of sustainable environmental development	F	46	209	246	2.40	0.651	High	10
		%	9.2	41.7	49.1				
8	There are announcements in the college to encourage students to follow local and international events related to sustainable environmental development	F	54	202	245	2.38	0.673	High	12
		%	10.8	40.3	48.9				
9	Student activities in the college help me express my ideas about environmental issues	F	54	199	248	2.39	0.674	High	11
		%	10.8	39.7	49.5				
10	Students participate in some environmental events such as: World Environment Day, Water, and Health	F	45	190	266	2.44	0.653	High	5
		%	9.0	37.9	53.1				
11	Students are educated about preserving public property in the college, including furniture, electronic devices, and others.	F	32	190	279	2.49	0.615	High	1
		%	6.4	37.9	55.7				
12	Events and activities are held in the college to discuss the Kingdom's Vision 2030 related to environmental conservation, and to discuss the most important issues, such as: recycling, a green Saudi environment	F	52	191	258	2.41	0.671	High	8
		%	10.4	38.1	51.5				
	Weighted Mean					2.44	0.507	**High**	

Table 9 shows that the students participating in the study agree that the colleges of education achieve the goals of sustainable development in the environmental dimension from an educational perspective to a high degree, with M (2.44 out of 3) and SD (0.507). All the items in this dimension were achieved to a high degree, as the item "Students are educated about preserving public property in the college, including furniture, electronic devices, etc." came in first place with M (2.49 out of 3) and SD (0.615). The item "Some university courses contribute to instilling Islamic values related to sustainable environmental development" came in second place with M (2.46 out of 3) and SD (0.617). The item "The college holds workshops or training courses related to environmental issues" came in third place with M (2.44 out of 3) and SD (0.638). While the term "There are advertisements in the college to encourage students to follow local and global events related to sustainable environmental development" came in last place with a high verification degree with M (2.38 out of 3) and SD (0.673).

5. Discussion

The current study aimed to identify the role of colleges of education in achieving SDG 4 (Sustainable Development Goal 4) and its indicators from an educational perspective, through the three dimensions of sustainable development (social, economic, and environmental). The study yielded the following results:
First result: There is agreement among the opinions of the students participating in the study that the university achieves the sustainable development goals from an educational perspective to a high degree, and the dimensions were arranged in descending order: (The role of colleges of education in achieving the sustainable development goals in the social dimension from an educational perspective) in first place, then the Dimension (The role of colleges of education in achieving the sustainable development goals in the environmental dimension from an educational perspective) in second place, then the Dimension (The role of colleges of education in achieving the sustainable development goals in the economic dimension from an educational perspective) in third place. This result may be attributed to the efforts made by Prince Sattam bin Abdulaziz University in achieving the Kingdom's Vision 2030, in which the Arab and Islamic depth appears through a vibrant society, a thriving economy, and an ambitious homeland, which emphasized the concepts of sustainable development as its goals in a number of Dimensions, such as ensuring environmental sustainability, reducing pollution of all kinds, enabling a healthy life, enhancing national identity and values of justice and transparency, improving equal opportunities for access to education, and developing the digital economy. This result is consistent with what many studies have confirmed, such as: Al-Sheety (2020), Al-Banna (2023), Gerio et al. (2020).

Accordingly, this result could be due to the increased awareness of the social dimensions of sustainable development: The social dimension ranks first in this study, indicating that students recognize the importance of the role that colleges of education play in promoting social values such as equality, justice, and community development. This may be a result of the increasing focus in educational programs on the human and social dimensions of sustainable development. Increased interest in environmental issues: The environmental dimension ranking second may indicate increased environmental awareness among students, but there may still be a lack of full integration of environmental issues into the curriculum compared to the social dimensions. Although students recognize the role of the university in promoting environmental sustainability, this dimension may require more efforts to enhance applied environmental knowledge. Lack of focus on the economic dimension: The presence of the economic dimension in third place may be explained by the fact that students see universities as focusing less on the economic aspects of sustainable development from an educational perspective. There may be a gap in educational orientations regarding linking education to the challenges of the green economy and sustainable economic development. Differences in priorities for sustainable development among students: The order of the themes reflects the differences in priorities among participating students, as social and environmental issues may have greater resonance with them based on the curricula or university activities to which they were exposed. This could point to the importance of promoting a

greater balance between the three dimensions in educational curricula. The role of educational policies in shaping trends: The educational policies and guidelines followed by Prince Sattam bin Abdulaziz University may be the main driver that determines the order of these Dimensions. If there is a greater institutional focus on social and environmental aspects, it is natural that these priorities will be reflected in students' opinions.

The second result showed that the students participating in the study agreed to a high degree that the colleges of education at Prince Sattam bin Abdulaziz University achieve the goals of sustainable development in the social dimension from an educational perspective to a high degree. This result can be explained by the efforts made by the university and colleges of education to provide students with the opportunity to participate in some social occasions such as: World Teachers' Day, National Day, and Foundation Day. The results also showed that students believe that there are some courses that include topics that contribute to instilling Islamic values related to organizing social relations between members of society, and some university courses include study topics on social responsibility. This result is consistent with many previous studies, including Mahmoud's study (2022), which revealed (71) roles for colleges of education in developing social responsibility with its three elements: interest, understanding, and participation. Al-Barawi's study (2021), which emphasized the role of the university in achieving the contents of sustainable development, such as: productivity, equality, sustainability and empowerment, and the dimensions of sustainable development represented by the economic dimension, the social and human dimension, the environmental dimension, and the technological dimension. As well as the study of Al-Sharaabi (2020), which emphasized the role of the university in achieving intellectual security as a requirement for sustainable development, and its importance in the stability of countries, and pushing them towards progress.

Accordingly, this result could be due to the focus of Faculties of Education on Promoting Social Values: this positive view may be because faculties of education pay special attention to teaching social values such as justice, equality and cooperation. These values can be systematically integrated into the curriculum, enhancing students' awareness of the importance of social development. Direct interaction between students and the community: faculties of education are likely to provide practical opportunities for students to interact with the community through field projects, volunteering or internships. This type of interaction enhances students' understanding of their role in society and their ability to contribute to achieving social sustainable development goals. The role of student activities and social initiatives: student activities such as clubs and societies that focus on social issues may play a significant role in promoting this awareness. If the university encourages social initiatives and community engagement, this may contribute to students' view of faculties of education as institutions that contribute to achieving the social dimension of sustainable development. The university's response to national and international policies: faculties of education may have responded effectively to national and international education policies that focus on the importance of the social dimensions in achieving sustainable development. This commitment to policies and guidelines can positively impact students' perceptions of the university's role in this area. Educational programs focus on social issues: curricula in colleges of education are likely to be oriented towards social issues such as poverty, gender equality, and human rights, which enhances students' awareness of the social role of education. This continued focus on social issues can create a learning environment that encourages students to recognize the importance of this dimension in sustainable development.

The third result showed that the students participating in the study agreed to a high degree that the faculties of education achieve the sustainable development goals in the economic dimension from an educational perspective. This is evident through the student activities promoting the concepts of sustainable development, such as: volunteer work, participation in international bodies in the field of education, encouraging faculty members and students to attend local and international seminars and conferences in sustainable development in the field of economics, and encouraging the college to its

students to manage some campus projects. This result is consistent with the study of Al-Barawi (2021), which emphasized the role of the university in achieving the sustainable development goals, including productivity, which is a focal point for the economic dimension of sustainable development.

Accordingly, this result could be due to enhancing students' economic skills: Colleges of education may focus on developing basic economic skills, such as entrepreneurship, financial management, and awareness of the importance of a sustainable economy. This focus may make students see that colleges contribute to preparing them to participate effectively in a sustainable economy. Integrating economic education into curricula: If curricula integrate economic sustainability concepts such as rational resource and energy management and green economy, this may lead students to believe that colleges of education contribute effectively to achieving the economic goals of sustainable development. Awareness of the role of economics in sustainable development: Colleges of education may promote awareness of the importance of the role of economics in achieving sustainable development through educational curricula or university activities. Students may be taught how an economy that supports sustainable development can contribute to achieving social and environmental justice. Focusing on job skills and economic empowerment: Colleges of education may enhance practical skills that enable students to succeed in the labor market, and thus contribute to the national economy. This link between education and the labor market may make students feel that the university contributes to achieving the economic dimension of sustainable development. Entrepreneurial and community projects: The university may encourage students to participate in entrepreneurial or community projects that focus on the local economy and sustainable development. This type of project enhances students' understanding of the importance of economics in the educational and social context, which supports their positive assessment of the role of colleges of education in achieving economic goals.

The fourth result showed that the students participating in the study agreed to a high degree that colleges of education achieve the goals of sustainable development in the environmental dimension from an educational perspective. Perhaps what confirms this result are the practices adopted by colleges of education through educating students about preserving public property in the college, such as furniture, electronic devices, and others, from the perspective of Islamic law, and including some university courses on topics that contribute to instilling Islamic values related to sustainable development of the environment, as well as through the college holding workshops or training courses related to environmental issues from an Islamic perspective. This result was consistent with the recommendations of many studies that emphasized the importance of activating the role of the university in achieving the environmental dimension of sustainable development from an Islamic perspective, such as: Al-Rawi's study (2023), which revealed the Qur'anic directives in sustainable development and its role in human construction, the cultivation of the earth, and the preservation of wealth, which is the source of human strength; Al-Sawy's study (2023), which emphasized the importance of awareness of climate change and future thinking among student teachers at the Faculty of Education; Al-Banna's study (2023), which recommended the necessity of removing obstacles facing the university to prepare a pioneering teacher for sustainable environmental development; and Mustafa's study (2022), which revealed the dimensions of sustainable development from the perspective of Islamic law, the basis of which is achieving the interests of servants in matters of this life and the hereafter, and to draw the attention of those concerned, including Muslim jurists and economists, to the necessity of establishing a legal basis for this important issue, and deriving the legal rulings related to it contained in the legal texts, and emphasizing that Islamic law was prior to any positive theory in this field, as the religious motive of the Muslim student must be the real motivation for adopting practices that protect the environment and implement sustainable development programs. And its consolidation of the principles of Islamic law.

Accordingly, this result could be due to promoting environmental awareness in the curriculum: Colleges of education are likely to effectively integrate environmental sustainability concepts into the curriculum. Students may be taught about contemporary environmental issues such as climate change, biodiversity conservation, and sustainable natural resource management, which leads to enhancing their

awareness of the environmental role of education. Implementing environmental practices within the university: The university may have taken concrete steps towards achieving environmental sustainability by improving infrastructure and implementing environmentally friendly practices, such as reducing waste, using renewable energy, or supporting recycling programs, which makes students see that colleges of education contribute to achieving the environmental goals of sustainable development. Participation in environmental activities: Student activities that focus on the environment, such as awareness campaigns or environmental projects, may have contributed to enhancing students' sense of the importance of the environmental dimension. Participation in these activities may contribute to increasing students' awareness of the importance of the role of colleges of education in this field. Focusing on practical education and environmental research: Colleges of education may provide practical educational opportunities related to environmental sustainability, such as conducting field research related to the environment or participating in environmental projects that enhance a deep understanding of environmental issues. This practical learning can enhance students' assessment of the role of colleges of education in achieving environmental sustainability. Responding to national and international environmental policies: Colleges of education may have adopted environmental sustainability principles based on national or international environmental policy directives. These institutional initiatives, consistent with the Sustainable Development Goals, can contribute to supporting students' perceptions of the importance of the environmental dimension in colleges of education programs.

6. Conclusion

The current study aimed to reveal the role of colleges of education in Achieving SDG 4 (Sustainable Development Goal 4) and its indicators from an educational perspective (Prince Sattam bin Abdulaziz University as a model), where the study relied on the descriptive analytical approach, and data was collected through a questionnaire consisting of (36) statements, divided into three dimensions (the social dimension - the economic dimension - The environmental dimension) and its application to a sample of students from the College of Education. The results of the study revealed to achieving the sustainable development goals from an educational perspective to a high degree in all their social, economic, and environmental dimensions. It is expected that the results of the study will contribute to developing the programs of colleges of education to achieve the goals of sustainable development from an educational perspective. The study developed a set of recommendations for faculty members as the need for colleges of education to review their strategic plans considering the sustainable development goals according to the Kingdom's Vision 2030, so that they highlight their educational and Islamic foundations. Paying attention and being keen to include topics related to sustainable development in the curricula, each in its own regard, and studying it from all its Islamic legal aspects. Enacting legislation that achieves the components of sustainable development from an educational perspective. Focusing scientific academies in Islamic sciences on such issues; to show what distinguishes Islamic law from other laws. The parties concerned with the educational process, especially colleges of education, should study the challenges that limit the role of the university in achieving the requirements of sustainable development, clarifying their causes and working to reduce them. The need to hold training workshops to raise awareness among students at colleges of education about the dimensions of sustainable development and the factors that affect it. The university should organize events that support communication and exchange of experiences between students and community institutions related to the dimensions of sustainable development, socially, economically and environmentally. Furthermore, the current study recommends conducting studies, such as: The impact of a training program in sustainable development practices on developing awareness of the dimensions of sustainable development among students at colleges of education. Analysis of the content of university courses considering the requirements of sustainable development. The effectiveness of a proposed program based on the goals of sustainable development in developing positive thinking among university students.

Conflicts of Interest: The author declares no conflict of interest.

Disclaimer Statement: This is an independent article and not part of a thesis submitted to a university for award of any degree.

Authorship and Level of Contribution

In the event that the paper is co-authored, please indicate the level of contribution of each author.

Glossary of Terms

Provide a list of words and phrases and their meanings in English if in any case your work has borrowed any foreign word.

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