

Journal of Applied Sports Science June 2025, Volume 15, No. 1 www.jass.alexu.edu.eg



Green Economy as an Approach to Developing the Physical Education Curriculum System: A Future Vision to Achieve Sustainable Development Goals.

Assist. Prof. Islam Salah El-Sayed El-Shaer⁽¹⁾

(1) Assistant Professor of Curriculum and Teaching Methods in the Department of Curriculum and Teaching Methods for Physical Education – Faculty of Physical Education for Boys – Alexandria University.

Abstract:

The study aims to explore the integration of green economy principles into physical education curricula, focusing on environmental sustainability and education for sustainable development. It provides a proposed framework for incorporating green economy dimensions into physical education programs to contribute to both environmental and educational goals.

Measurement Tools:

- 1. Content Analysis: Analysis of current physical education curricula to evaluate the presence of green economy concepts.
- 2. Surveys/Questionnaires: Distributed among educators and stakeholders to assess awareness and practices regarding sustainability in physical education.
- 3. Case Studies: Review of international best practices and green initiatives in sports and education to develop a suitable framework for curriculum development.

Key Findings:

- 1. Lack of Green Economy Integration: Physical education curricula at the preparatory stage level level do not adequately incorporate green economy concepts, such as resource efficiency, renewable energy, and waste management.
- 2. Absence of Environmental-Related Activities: There is a noticeable gap in environmental-oriented educational activities within physical education programs.
- 3. Limited Assessment Tools: Current assessment methods do not measure students' environmental awareness or their application of sustainable practices within sports contexts.
- 4. Insufficient Teacher Preparation: Teacher training programs do not sufficiently prepare educators to integrate green economy principles into physical education
- Keywords: (Green Economy Approach Physical Education Curricula Achieve Sustainable Development, Future Vision)

Introduction:

Contemporary societies are witnessing rapid transformations across various sectors in response to the increasing global environmental challenges, foremost among them climate change, the depletion of natural resources, and environmental pollution. These challenges have led countries and institutions to adopt sustainable development policies based on what is known as the "green economy," which aims to achieve economic growth alongside environmental preservation, social justice, and ensuring the well-being of future generations.

In light of these transformations, sports emerge as a vital field capable of supporting the goals of sustainable development by promoting healthy lifestyles, spreading environmental awareness, and guiding societal behavior towards more sustainable practices.

Thus, it becomes necessary to reconsider the system of physical education curricula, not only as a framework for teaching physical and cognitive skills but also as a strategic tool for disseminating the concepts of the green economy and developing environmental awareness within an effective educational and pedagogical context.

Despite efforts by some educational institutions to integrate environmental dimensions into the curricula, the physical education curriculum system—specifically—still lack integration with sustainability concepts in many educational systems, and does not clearly reflect modern trends associated with the green economy.

Based on the above, this research seeks to explore the potential of employing the green economy approach in developing physical education curricula at the preuniversity education stage by analyzing the environmental dimensions that can be integrated, identifying strengths and weaknesses in the current situation, showcasing leading global models in integrating the green economy into physical education, and proposing a future vision that aligns with the 2030 sustainable development goals. This will contribute to building an environmentally conscious generation, prepared to engage in sports in an environmentally and socially responsible manner. The concept of the green economy refers to an economy that achieves growth while minimizing environmental harm through the optimal use of natural resources, reducing emissions, and supporting renewable energy sources (UNEP, 2011). This concept aligns closely with the educational function of curricula, which aims to prepare informed learners who are active participants in building a more sustainable future. (10)

Research Problem:

In light of the environmental and economic challenges facing the contemporary world, there is a growing need to develop educational curricula across various disciplines to align with the concepts of the green economy and support the goals of sustainable development. Physical education curricula are among the areas that remain relatively distant from systematically employing these concepts, despite their great potential in fostering environmental behaviors and promoting sustainability culture among the youth. (5: 66-81).

In the context of climate change and increasing environmental awareness, many physical education curricula in schools and universities remain traditional and do not incorporate the principles of the green economy or sustainable development. This results in a weakened role for graduates in contributing to environmental preservation through sports activities.

Given the profound environmental changes the world is witnessing, including global warming, loss of biodiversity, and the degradation of natural resources, there is an urgent need to reconsider educational systems in order to direct them towards sustainability and green economy concepts. School curricula are considered one of the key mechanisms for developing environmental awareness among individuals and promoting eco-friendly practices within various disciplines. (12)

According to the study by Hopwood et al. (2005), integrating green economy concepts into education is no longer an option but a necessity to meet the requirements of sustainable development, especially in light of global shifts towards new patterns of production and consumption based on environmental efficiency and social responsibility. (8: 38-52)

The United Nations' 2015 Sustainable Development Goals (SDGs) framework recommends revising and updating all school curricula to include sustainable practices that foster green transformation in society. (13)

Hamza (2020) notes that integrating green economy concepts into education contributes to building positive environmental attitudes and develops learners' life and professional skills in line with contemporary developments. (7: 215-238)

Abdel Aziz (2019) explains that incorporating these concepts into curricula supports the transition towards active environmental education and enhances the ability to make environmentally responsible decisions. (5: 66-81)

Although physical education plays a significant role in shaping lifestyles and behaviors, its curricula still, in many institutions, lack an environmental approach. They traditionally focus on physical, cognitive, and skill-related aspects, without addressing the environmental or sustainability dimension.

Al-Azouni's study (2022) confirms that most physical education curricula in Arab universities do not include sustainability-related topics and do not direct graduates towards environmentally conscious sports practices, such as water conservation on sports fields or reducing plastic waste at sporting events. (2: 45-60)

Schulenkorf (2017) emphasizes that sport can support sustainable development efforts by:

- Promoting health (Goal 3 of the SDGs).
- Spreading a culture of peace and responsibility.
- Reducing the environmental impact of sporting events.
- Strengthening environmental awareness among youth. (9: 243-255)

With the escalating impacts of climate change, it is no longer acceptable for physical education curricula to remain detached from environmental crises. The absence of green approaches in these curricula weakens learners' role in spreading sustainability culture, especially as they are among the most influential groups in youth and society.

Na'im's study (2021) highlights that developing physical education curricula to include green economy and sustainability concepts can contribute to preparing environmentally conscious sports teachers, integrating ecofriendly activities into the curriculum, and changing students' behavior towards responsible sports practices. (3: 88-104)

In light of Egypt's Vision 2030, which aims to achieve comprehensive and sustainable development through the adoption of green economy principles, the pivotal role of physical education curricula emerges in supporting this vision through educational and pedagogical mechanisms that contribute to instilling environmental sustainability concepts among students. Physical education is considered an effective means of promoting environmental awareness by integrating eco-friendly practices into educational and sports activities, such as raising awareness about rational resource consumption, utilizing sustainable tools and equipment, and encouraging recycling within sports contexts. These curricula also contribute to developing positive environmental behaviors and promoting a healthy lifestyle that aligns with the goals of sustainable development. Consequently, the integration of physical education objectives with Egypt's Vision 2030 constitutes a strategic framework for building an environmentally conscious generation capable of effectively contributing to the realization of a sustainable green economy.

Given the Egyptian state's firm commitment to achieving balance and integration through its Vision 2030 by supporting and incorporating green economy concepts and affirming sustainable development through various initiatives—most notably the "Live Green" initiative—this study seeks to investigate the potential for employing the green economy approach in the development of physical education curricula at the preparatory stage. This will be achieved by analyzing the environmentally integrable dimensions, identifying strengths and weaknesses in the current situation, reviewing leading international models in integrating green economy concepts into physical education, and proposing a forward-looking vision that aligns with the Sustainable Development Goals (SDGs) of 2030, thereby contributing to the formation of an environmentally aware generation qualified to practice sports within an environmentally and socially responsible framework.

Based on the above, the research problem can be formulated in the following main question:

"How can the green economy approach be utilized to develop the physical education curriculum at the preparatory stage in a way that supports a future vision aligned with the goals of sustainable development?" Research Objectives:

This study aims to:

- 1. Monitor and analyze the current state of integrating green economy concepts into physical education curricula at the preparatory stage.
- 2. Identify the existing shortcomings in these curricula in light of sustainable development requirements.
- 3. Propose applicable environmental dimensions and content within the educational sports context.
- 4. Present a forward-looking vision for developing physical education curricula at the preparatory stage through the lens of the green economy approach.
- 5. Support the alignment of environmental and physical education orientations with the achievement of the Sustainable Development Goals (SDGs) 2030.

Research Questions:

- 1. What is the status of integrating green economy concepts into physical education curricula at the preparatory stage?
- 2. What environmental and educational dimensions can be integrated into these curricula?
- 3. What are the leading international models for integrating green economy principles into physical education?
- 4. What is the proposed future vision for developing these curricula in accordance with sustainable development requirements?

Significance of the Study:

• Theoretical Significance:

This study contributes to enriching educational knowledge by integrating green economy concepts into the curricula of physical education at the preparatory level. It is considered one of the studies addressing curriculum development from the perspective of achieving sustainable development.

• Practical Significance:

The research offers a practical, applicable framework for educational institutions. It can serve as a guide for teachers, educational supervisors, and policymakers incorporating environmental dimensions into preparatory stage physical education curricula.

Research Objectives:

This research aims to:

- 1. Survey and analyze the status of incorporating green economy concepts into physical education curricula.
- 2. Identify the existing gaps in the curricula in light of the requirements for sustainable development.
- 3. Propose environmental dimensions and contents that can be applied in the educational sports context.
- 4. Present a future vision for the development of physical education curricula in light of the green economy approach.
- 5. Support the trends of environmental and sports education in achieving the 2030 sustainable development goals.

Research Importance

• Theoretical Importance:

This research contributes to enriching educational knowledge by integrating green economy concepts into the field of physical education curricula. It is one of the studies addressing this topic from the perspective of curriculum development for sustainable development.

• Practical Importance:

The research provides a practical, applicable framework for educational institutions and can serve as a guideline for teachers, educational supervisors, and policymakers to incorporate environmental aspects into physical education curricula.

Key Terms of the Study:

1. Green Economy

• Conceptual Definition:

The green economy is a model of economic development aimed at achieving sustainable growth by improving human well-being and social equity, while significantly reducing environmental risks and ecological degradation. (11)

• Operational Definition:

In this study, it refers to a set of environmental principles and practices that can be integrated into physical education curricula at the preparatory stage to achieve sustainable development goals, such as resource conservation, waste reduction, and the promotion of positive environmental behavior.

2. Physical Education Curricula

Conceptual Definition:

These are the courses and learning activities designed to develop the physical, cognitive, psychological, and social aspects of preparatory stage learners through physical education and sports activities, based on specific educational objectives. (1: 55–71)

• Operational Definition:

Referring to the scientific content, activities, and practical applications delivered within the physical education curriculum at the preparatory level, which are analyzed in terms of their incorporation of green economy dimensions.

3. Sustainable Development

• Conceptual Definition:

Sustainable development means meeting the needs of the present without compromising the ability of future generations to meet their own needs, while maintaining a balance between economic growth, social equity, and environmental protection. (14)

• Operational Definition:

It represents the reference framework by which the effectiveness of preparatory stage physical education curricula is assessed in supporting environmental awareness and contributing to long-term environmental and social development goals.

4. Future Vision

• Conceptual Definition:

A scientifically based foresight built on logical analysis of current realities and emerging trends, aimed at proposing feasible development solutions. (4: 45–60)

• Operational Definition:

Referring to the researcher's proposed framework for developing physical education curricula at the preparatory stage in accordance with green economy trends to achieve sustainable development goals.

5. Approach

• Conceptual Definition:

In education, an "approach" refers to the theoretical or conceptual framework upon which curriculum design or educational planning is based. (6: 18)

• Operational Definition:

Refers to adopting the green economy as a guiding framework for developing the content of physical education curricula at the preparatory stage, in order to align them with environmental concerns and sustainability orientations.

Research Delimitations:

• Thematic Delimitation:

The study addresses the integration of green economy concepts into the development of physical education curricula at the preparatory education level.

• Spatial Delimitation:

The research is applied to physical education curricula implemented in preparatory schools.

Temporal Delimitation:

The study was conducted, and data were analyzed during the academic year 2024/2025.

• Human Delimitation:

The research is based on a sample comprising curriculum and environmental experts, as well as physical education teachers and supervisors.

• Research Sample:

The research sample consisted of a group of physical education teachers and supervisors at the preparatory stage in Alexandria Governorate, totaling 60 participants, all of whom have at least 10 years of experience in teaching and supervision.

Research Methodology:

The study employs a descriptive analytical approach, through the following procedures:

- Analyzing the content of preparatory-stage physical education curricula to identify the extent to which green economy concepts are embedded.
- Designing a questionnaire directed at physical education teachers and supervisors to assess the current situation and explore prospects.
- Conducting statistical analysis using weighted means and frequencies to determine the level of concept integration and areas of deficiency.
- Developing a proposed framework for enhancing preparatory-stage physical education curricula based on the study findings.

Data Collection Tools

1. Content Analysis Checklist

A content analysis checklist was developed to assess preparatory stage physical education curricula in light of green economy indicators and the UNESCO Sustainable Development Guide (2017) (Appendix 3).

Tool Development:

First: Objective of the Content Analysis Checklist The checklist aims to:

- Identify the extent to which preparatory stage physical education curricula incorporate green economy concepts and principles.
- Measure the alignment of educational content with the requirements of sustainable development, as outlined in the UNESCO Guide (2017).
- Propose future improvements to enhance the environmental and educational sustainability of the curriculum.

Second: Theoretical Framework for Checklist Development

The checklist is based on the integration of two main references:

- Green economy indicators in education (e.g., conservation, recycling, environmental management, and sustainable practices).
- The four dimensions of sustainable development according to UNESCO (2017):
 - Environmental dimension
 - Economic dimension
 - Social dimension
 - Cultural and educational dimension

Third: Steps for Developing the Checklist

- Review of Literature: A comprehensive review of prior studies (e.g., studies no. 1, 2, 3, 4, 5, 7, 10, 11, 14) focused on integrating sustainability and green economy into curricula, including physical education.
- Defining General Themes: Identification of analysis dimensions (objectives – content – activities – assessment – learning environment – values and behaviors) (Appendix 2).
- Formulating Detailed Indicators: Development of analyzable and interpretable indicators applicable to preparatory stage physical education curricula.

- Designing the Checklist: Construction of a tool that includes item number indicator indicator presence (Yes / To some extent / No) remarks.
- Expert Validation: Presentation of the checklist to specialists to ensure content validity.
- Pilot Application: Conducting a preliminary analysis on a sample section of the curriculum to refine and calibrate the checklist items

Fourth: Checklist Dimensions and Their Detailed Indicators

• Objectives:

Are there any environmental or developmental goals included?

Does the preparatory stage physical education curriculum aim to prepare learners for sustainable sports behavior?

Content:

Does it include concepts such as recycling?

Does it address responsible energy consumption?

Does it link sports with environmental preservation?

Example: A chapter titled "Sports and Environmental Sustainability."

• Activities:

Are there environmentally themed sports activities? Do the activities promote teamwork for environmental service?

Example: Organizing a bike race to reduce emissions.

• Assessment:

Are environmental behaviors evaluated?

Are green projects included in the assessment?

Example: A project for organizing a green sports event.

• Learning Environment:

Does the curriculum consider the use of eco-friendly resources?

Does it encourage the use of sustainable sports facilities? Example: Using recycled sports equipment.

Values and Behaviors:

Are environmental responsibility values reinforced? Does the curriculum promote respect for the sports environment?

Example: Including stories or behavioral awareness cases. **Fifth: Scoring of Indicators**

Each indicator is evaluated using a three-point scale:

- Yes: The indicator is clearly present in the curriculum or document.
- To some extent: The indicator is present but insufficiently or implicitly.
- No: The indicator is completely absent.

2. Questionnaire (Appendix 4)

The researcher used both questionnaire and personal interviews for data collection.

Questionnaire Design:

To develop the questionnaire, the following steps were followed:

- 1. A literature review was conducted covering previous studies and references related to the topic.
- 2. The questionnaire items were prepared in alignment with the content analysis checklist and based on

sources and studies numbered (4), (6), (8), (9), (11), (15), (16), and (18).

- 3. The questionnaire dimensions were determined according to the study's objectives.
- 4. Items were formulated to accurately reflect each dimension.
- 5. The initial version of the questionnaire was submitted to a panel of ten experts (Appendix 1) to assess:
 - The appropriateness of the dimensions for the study topic.
 - The relevance of each item to its corresponding dimension and to the study topic.
 - The clarity, objectivity, and comprehensiveness of the items.

Scientific Validity of the Questionnaire:

First: Validity

• Content Validity (Expert Judgment):

The researcher relied on expert reviews to determine the appropriateness and clarity of the dimensions and items. Some items were deleted or revised based on expert feedback (Appendix 4).

• Construct Validity:

Self-validity was calculated for each dimension, as shown in the table (Appendix 5).

Second: Reliability:

• Reliability was tested using the test-retest method:

The questionnaire was applied and then reapplied after seven days. The first administration took place on 10/12/2024, and the second on 17/12/2024 with a random sample of ten physical education teachers and supervisors from outside the main study sample (Appendix 6).

Pilot Study:

A pilot study was conducted on a randomly selected sample of ten physical education teachers and supervisors from the original population but outside the main study sample. The purpose was to assess the clarity and comprehensibility of the questionnaire items. The researcher confirmed that the items were generally clear and understandable and clarified the purpose and meaning of each dimension and item when needed.

Study Implementation:

The main study was conducted with the target sample of teachers and supervisors in the period from December 18, 2024, to April 18, 2025.

Statistical Treatments:

- 1. Percentage
- 2. Chi-square test
- 3. Weighted arithmetic means (three-point Likert scale)
- 4. Internal consistency coefficient
- 5. Cronbach's Alpha coefficient

Presentation and Discussion of Results:

First: Presentation and Discussion of the Main Research Question:

"How can the green economy approach be employed to develop the physical education curriculum at the preparatory stage in a way that supports a future vision aligned with the goals of sustainable development?" This main question aims to explore mechanisms for integrating green economy principles into physical education curricula to enhance their alignment with sustainable development goals. From this main question, the following sub-questions emerge:

- 1. What is the current status of integrating green economy concepts into the physical education curricula at the preparatory stage?
- 2. What environmental and educational dimensions can be incorporated into these curricula?
- 3. What are the leading global models in integrating green economy principles into physical education?

- 4. What is the proposed future vision for developing these curricula in light of sustainable development requirements?
- 1. What is the current status of integrating green economy concepts into the physical education curricula at the preparatory stage?

This was examined through a questionnaire administered to a sample of 60 physical education teachers and supervisors. The data were analyzed using the weighted arithmetic mean.

Table (1)
Weighted Arithmetic Mean of the Study Sample's Responses Regarding the Current Status of Integrating Green
Economy Concepts into the Physical Education Curricula at the Preparatory Stage

(n	=	60)

М	First: Objectives (Statement)	Weighted Mean	Ka2	Relative Weight	Ranking
1	Does the curriculum include an environmental component (such as environmental protection or sustainability)?	1.51	39.57*	50.04	5
2	Do the objectives focus on raising awareness of the green economy?	1.54	41.46*	52.44	4
3	Do the objectives include achieving sustainable development in sports?	1.59	19.50*	54.12	2
4	Are the objectives linked to achieving environmental justice or equality in access to sports activities?	1.58	45.80*	53.25	3
5	Do the objectives include health/community aspects related to the environment?	1.78	41.71*	57.11	1

Ka2 value is statistically significant at the 0.05 level = 4.90 with 2 degrees of freedom.

Ka2 value is statistically significant at the 0.05 level = 3.31 with 1 degree of freedom.

Likert Scale: Weighted mean interpretation: 1.00-1.66 (No), 1.67-2.33 (Somewhat), 2.34-3.00 (Yes).

Discussion:

Table (1) shows that the weighted mean for the attitudes of the study sample towards the inclusion of green economy concepts in the physical education curricula at the preparatory stage in the first axis (objectives) ranges from 1.51 to 1.78, which is in statements (1 to 5). The statistical significance of responses (Ka2) ranged from 19.50 to 45.80. The statement "Do the objectives include health/community aspects related to the environment?" received the highest weighted mean of 1.78, with a relative weight of 57.11, ranking first among the statements in the "Objectives" axis.

The lack of inclusion (Yes) is attributed to the fact that while there are health-related objectives in the curricula, these curricula often fail to clarify the relationship between sports behavior and environmental practices. For example, there are insufficient references to reducing water and energy consumption in sports facilities, waste generation, or using eco-friendly sports equipment. Active transportation (walking, cycling) as an alternative to vehicles is also not encouraged. Additionally, the curricula rarely incorporate community-related environmental dimensions (such as collaboration and sportsmanship), and these aspects are often not connected to the concepts of environmental citizenship. Moreover, topics like environmental justice or the right to a clean environment for practicing sports are not addressed. Furthermore, the objectives do not focus on raising awareness of the green economy.

This aligns with the study by Al-Azzouni (2022), which indicates that most sports education curricula in the Arab world do not include sustainability topics or guide graduates toward practicing sports in an environmentally responsible way, such as water conservation on fields or reducing plastic waste in sports events. The objectives also do not focus on environmental justice or equal access to sports activities, which is echoed in the study by Naim (2021), which emphasizes that developing physical education curricula to include green economy and sustainability concepts can contribute to preparing environmentally conscious sports educators, integrating eco-friendly activities into curricula, and changing students' behavior toward responsible sports practice

Islam El-Shaer

 Table (2)

 Weighted Mean of Study Sample's Attitudes towards the Reality of Including Green Economy Concepts in Physical

 Education Curricula at the preparatory stage.

Μ	Second: Content (Statement)	Weighted Mean	Ka2	Relative Weight	Ranking
1	Does the content include green economy concepts (such as resource efficiency, renewable energy)?	1.58	19.46*	56.09	5
2	Does it address environmental issues like stadium pollution or sports waste management?	1.59	61.46*	58.44	4
3	Does it refer to sustainable environmental practices in physical activities?	1.62	16.00*	58.12	2
4	Does the content include local/global examples related to sports and the environment?	1.60	48.86*	55.25	3
5	Is there a connection between sports, public health, and the environment?	1.73	51.74*	59.17	1
6	Does it address concepts like recycling, water and energy conservation, and reducing plastic use?	1.57	19.30*	53.82	6

N=60

Ka2 value is statistically significant at the 0.05 level = 4.90 with 2 degrees of freedom.

Ka2 value is statistically significant at the 0.05 level = 3.31 with 1 degree of freedom.

Likert Scale: Weighted mean interpretation: 1.00-1.66 (No), 1.67-2.33 (Somewhat), 2.34-3.00 (Yes).

Discussion:

Table (2) illustrates the weighted mean of the study sample's attitudes towards the inclusion of green economy concepts in physical education curricula at the preparatory stage under the second axis (content). The values range from 1.58 to 1.73, with statistical significance (Ka2) ranging from 16.00 to 61.46. The statement "Is there a connection between sports, public health, and the environment?" received the highest weighted mean of 1.73, with a relative weight of 59.17, ranking first among the statements in the "Content" axis.

The lack of inclusion (Yes) is attributed to the following factors:

- 1. Lack of Green Economy Concepts: The content still focuses on skill-based and physical aspects, without connecting them to green economy concepts such as resource efficiency, renewable energy, and clean technologies in sports facilities. There are no dedicated units or lessons teaching students how sports activities can be practiced in an environmentally sustainable way.
- 2. Failure to Address Environmental Issues: Environmental issues like stadium pollution and sports waste management are not directly addressed. Sports content is often separated from the environmental context in curricula, as if sports are not part of the ecological system. There are no references to the impact of pollution on sports performance or the management of waste in school sports events, nor to environmental standards for sports facilities.
- 3. Weak Inclusion of Sustainable Practices: Physical activities are designed based solely on skill and competitive goals, with no consideration for environmental or ethical dimensions. Activities do not encourage sports practice in clean environments or

promote water conservation, eco-friendly equipment, or environmental awareness during sports activities.

- 4. Lack of Local/Global Examples: Curricula lack realworld applications linked to the local or global context, such as green sports campaigns, environmental initiatives in sports clubs, or examples like solar-powered sports clubs and green stadiums in Europe or Arab countries. The role of sports in combating climate change is also absent.
- 5. Weak Connection between Sports, Public Health, and the Environment: Health is addressed as a physical aspect only, without considering the interconnected system that includes the environment and lifestyle. Students are not taught how air quality impacts athlete health or how sports can help prevent diseases caused by environmental pollution. The role of active lifestyles in achieving environmental health is not emphasized.
- 6. Absence of Recycling and Resource Efficiency Concepts: Topics like recycling, water and energy conservation are often considered part of science or geography curricula, not "physical education." However, these could be easily integrated into teaching students how to reuse sports equipment and reduce waste during activities, such as creating school projects that promote green practices (e.g., water conservation posters).

Upon analyzing and reviewing the content of pre-university sports science curricula, it is evident that there is a significant gap in incorporating green economy concepts and sustainable environmental practices, despite the educational potential of this field in supporting sustainable development goals. This shortcoming is attributed to the traditional perspective on content, the lack of integration between skill-based goals and environmental concepts, and the insufficient training of teachers to incorporate the environmental dimension into educational sports activities. This aligns with studies by Hopwood et al. (2005), UNESCO (2021), Abdel Aziz (2019), and Hamza (2020), which call for curricula to include activities linking sports, public health, and the environment, as well as addressing concepts like recycling, resource conservation, and reducing plastic use, in addition to dealing with environmental issues like stadium pollution and sports waste management.

Table	(3)
-------	-----

Weighted Mean of Study Sample's Attitudes towards the Reality of Including Green Economy Concepts in Physical Education Curricula at the preparatory stage.

М	Third: Activities (Statement)	Weighted Mean	Ka2	Relative Weight	Ranking
1	Do the activities include practical projects related to sustainability (e.g., cleaning stadiums or environmental campaigns)?	1.53	49.42*	40.32	2
2	Do the activities encourage teamwork on local environmental issues?	1.50	48.63*	41.29	4
3	Are green economy concepts applied in sports activities (e.g., reusing sports equipment)?	1.42	29.14*	40.52	5
4	Are there innovative sports activities based on clean or outdoor environments?	1.51	49.86*	39.25	3
5	Are environmental awareness campaigns or competitions organized within the activities?	1.59	52.24*	48.01	1

Ka2 value is statistically significant at the 0.05 level = 4.90 with 2 degrees of freedom. Ka2 value is statistically significant at the 0.05 level = 3.31 with 1 degree of freedom. Likert Scale: Weighted mean interpretation: 1.00-1.66 (No), 1.67-2.33 (Somewhat), 2.34-3.00 (Yes).

Discussion:

Table (3) presents the weighted meaning of the study sample's attitudes towards the inclusion of green economy concepts in physical education curricula at the preparatory stage under the third axis (activities). The weighted mean ranges between 1.42 and 1.59 for statements 3 to 5. Statistical significance (Ka2) ranges from 29.14 to 52.24. Statement number 5, "Are environmental awareness campaigns or competitions organized within the activities?" received the highest weighted mean of 1.59, with a relative weight of 48.01, ranking first among the activities-related statements.

The lack of inclusion (Yes) is explained by the following factors:

- 1. Lack of Practical Projects Related to Sustainability: Sports activities generally focus on performance and competition, and practical projects linking sports with environmental sustainability (such as cleaning stadiums or environmental campaigns) are absent. Schools could implement initiatives like "Clean Sports Day" or "Eco-Marathons," but there are no curricular guidelines to support such activities.
- 2. Weak Encouragement of Teamwork on Local Environmental Issues: While physical education curricula include group activities for physical or social purposes, they do not direct this teamwork towards solving real environmental issues. Group exercises or games are not utilized to raise awareness about local environmental problems, such as schoolyard pollution or excessive plastic use.
- 3. Absence of Green Economy Concepts in Sports Activities: There is no awareness or guidance for

teachers on how to integrate green economy concepts like reusing sports equipment, minimizing resource consumption during training, or encouraging the use of recyclable materials. As a result, activities remain disconnected from sustainability principles.

- 4. Limited Use of Clean or Outdoor Environments in Innovative Sports Activities: Most sports activities take place in traditional sports facilities, and the outdoor environment (such as parks or open spaces) is not utilized in the physical education curriculum. This prevents students from connecting sports with clean air and nature, which is essential for promoting positive environmental behavior.
- 5. Lack of Environmental Awareness Campaigns or Competitions: There are no clear partnerships between physical education curricula and environmental organizations or initiatives. Curricula lack ideas or instructions for organizing activities such as "Cleanest Team" competitions, designing environmental awareness posters, or promoting "Green Sports" initiatives in schools.

This analysis aligns with findings from studies by UNEP (2021), and Al-Azzouni (2022), which highlight the clear absence of sustainability and green economy concepts in physical education curricula. These activities lack practical applications that promote environmental practices, and group work is not employed to address local environmental issues. Innovation in implementing activities in natural environments or through awareness campaigns is also missing, representing a major challenge in guiding physical education towards supporting sustainable development goals.

Islam El-Shaer **T** 11 (4)

Table (4)
Weighted Mean of Study Sample's Attitudes towards the Reality of Including Green Economy Concepts in Physical
Education Curricula at the preparatory stage

Л	• Fourth: Assessment (Statement)	Weighted Mean	Ka2	Relative Weight	Ranking
1	Does the evaluation measure the student's awareness of environmental practices?	1.46	19.74*	58.98	1
2	Does it include tools to assess the learner's environmental behavior?	1.32	37.88*	54.67	4
3	Are there final projects assessed according to green economy indicators?	1.24	21.11*	51.73	6
1	Does it include performance evaluation focusing on applying environmental practices in the sports context?	1.34	18.83*	55.25	3
5	Does it include a group evaluation for cooperative environmental projects?	1.28	31.70*	57.11	5

N=60

Ka2 value is statistically significant at the 0.05 level = 4.90 with 2 degrees of freedom. Ka2 value is statistically significant at the 0.05 level = 3.31 with 1 degree of freedom. Likert Scale: Weighted mean interpretation: 1.00-1.66 (No), 1.67-2.33 (Somewhat), 2.34-3.00 (Yes).

Discussion:

6

Table (4) presents the weighted meaning of the study sample's attitudes towards the inclusion of green economy concepts in physical education curricula at the preparatory stage under the fourth axis (evaluation). The weighted mean for the statements ranges from 1.24 to 1.46, and the statistical significance (Ka2) ranges between 17.25 and 37.88. Statement number 1, "Does the evaluation measure the student's awareness of environmental practices?" received the highest weighted mean of 1.46, with a relative weight of 58.98, ranking first among evaluation-related statements.

Are achievement files used to document students'

environmental practices?

The lack of inclusion (Yes) is attributed to the following factors:

- Limited Evaluation of Environmental Awareness: 1. Most evaluation tools focus only on physical or skillbased aspects and do not assess students' environmental awareness or their adoption of sustainable behaviors. This is due to the lack of institutional awareness of the importance of integrating environmental dimensions into learning outcomes.
- Absence of Tools for Assessing Environmental 2. **Behavior:** There are no standardized evaluation tools or behavioral assessment forms for environmental actions in the current curricula. Moreover, teachers are not trained to assess such behaviors, which leads to their neglect in daily practices.
- 3. Lack of Final Projects Based on Green Economy Indicators: There is a lack of guidance for students to undertake final projects related to environmental issues or resource efficiency. This is due to the absence of green economy principles in the curriculum's

objectives and content, along with a lack of coordination between physical education and other scientific subjects.

53.14

17.25*

1.37

2

- 4. Absence of Performance Evaluation Focused on Environmental Practices in Sports: Students are not trained in environmental practices during sports activities, such as waste management or resource conservation. As a result, such practices are not integrated into performance evaluations, leading to their exclusion from both formal and informal assessments.
- 5. Lack of Group Evaluations for Cooperative Environmental Projects: Group activities in physical education lessons often focus on collective physical performance without addressing environmental objectives or collaboration to solve local problems. This is due to the absence of sustainability culture in the subject's educational values.
- No Use of Achievement Files to Document 6. Environmental Practices: There are no documented or digital mechanisms to encourage students to keep records of their environmental work in sports activities. Achievement files usually focus on skillbased or technical activities, not environmental aspects.

This analysis aligns with findings from Al-Azzouni (2022) and Naeem (2021), which highlight the gap in integrating environmental evaluation practices in physical education curricula. This reflects a clear deficiency in designing educational goals, teacher training, assessment tools, and linking sports content to environmental contexts, resulting in weakness and deficiency in environmental evaluation components in the curricula.

Islam El-Shaer

Table (5)				
Weighted Mean of Study Sample's Attitudes towards the Reality of Including Green Economy Concepts in Physical				
Education Curricula at the preparatory stage				
N=60				

М	• Fifth: Learning Environment (Statement)	Weighted Mean	Ka2	Relative Weight	Ranking
1	Does the curriculum encourage the creation of sustainable sports fields or halls?	1.71	49.56*	63.09	1
2	Do the activities include guidelines for water and energy conservation?	1.60	24.50*	55.69	7
3	Is there any guidance on using sportswear made from recycled materials?	1.61	48.20*	60.30	6
4	Does the curriculum encourage the use of sustainable transportation to reach activities?	1.63	45.31*	62.66	5
5	Does it employ green technology (e.g., energy-efficient lighting, natural ventilation) in the training environment?	1.70	29.80*	59.62	2
6	Is there a mention of reducing waste produced by sports activities?	1.64	33.70*	61.95	4
7	Does the course address the design of environmentally friendly sports facilities?	1.66	26.81*	58.13	3

Ka2 value is statistically significant at the 0.05 level = 4.90 with 2 degrees of freedom. Ka2 value is statistically significant at the 0.05 level = 3.31 with 1 degree of freedom. Likert Scale: Weighted mean interpretation: 1.00-1.66 (No), 1.67-2.33 (Somewhat), 2.34-3.00 (Yes).

Discussion:

Table (5) shows the weighted meaning of the study sample's attitudes towards the inclusion of green economy concepts in physical education curricula the preparatory stage under the fifth axis (Learning Environment). The weighted mean for the statements ranges from 1.60 to 1.71, and the statistical significance (Ka2) ranges between 24.50 and 49.56. Statement number 1, "Does the curriculum encourage the creation of sustainable sports fields or halls?" received the highest weighted mean of 1.71, with a relative weight of 63.09, ranking first among statements related to the learning environment.

The lack of inclusion (Yes) can be attributed to the following factors:

- 1. Lack of Environmental Standards for Sports Facilities: Current curricula do not include educational units or activities that address environmental standards or sustainable design. Sports fields are viewed primarily as service facilities, without linking them to sustainability or environmental efficiency principles.
- 2. Conservation as a General Ethical Value: The concept of conservation, if mentioned, is treated as a general ethical value rather than an integrated method within the objectives or performance evaluation of activities. There are no practical activities supporting this integration.
- 3. Absence of Environmental Considerations in Sportswear: This concept is not addressed in the curriculum, as there is no inclusion of eco-friendly practices for sportswear, which results in a lack of

awareness about green practices in sportswear education.

- 4. No Mention of Sustainable Transportation: There are no references to sustainable transportation in the curriculum, which is due to the separation of sports education from transportation and environmental concepts in curriculum design. Furthermore, there is limited coordination with external environmental guidelines.
- 5. Lack of Green Technology in Training Environments: Green technology (e.g., energyefficient lighting, natural ventilation) is often ignored in curricula, and students are not exposed to such aspects as part of environmental culture or sustainability. Teachers are also rarely trained in these technologies.
- 6. No Activities for Waste Reduction: There are no organized or evaluative activities aimed at monitoring or reducing waste from sports activities, and behaviors like waste sorting or reuse are not included in learning objectives or sports behavior evaluations.
- 7. Absence of Environmental Engineering in Facility Design: There is no inclusion of environmental engineering or green design topics in the textbooks or activities, which reflects a lack of vision regarding environmental concerns in physical education curricula at the pre-university level.

This analysis aligns with the findings from Hussaini (2022) and Al-Azzouni (2022), which highlight the lack of environmental standards and sustainability principles in the learning environment within physical education curricula.

Islam El-Shaer

 Table (6)

 Weighted Mean of Study Sample's Attitudes towards the Reality of Including Green Economy Concepts in Physical

 Education Curricula at the preparatory stage

 N=60

	11-00				
М	• Sixth: Values and Behaviors (Statement)	Weighted Mean	Ka2	Relative Weight	Ranking
1	Are the acquired sports skills linked to positive environmental behaviors?	1.65	51.31*	66.20	6
2	Does the curriculum promote environmental responsibility values in sports practices?	1.67	51.46*	68.43	4
3	Does the curriculum develop the learner's behavior in preserving the cleanliness of sports facilities?	1.96	56.37*	69.38	1
4	Does the curriculum encourage respect for the surrounding ecosystems of the activity place?	1.60	48.86*	65.20	7
5	Does the curriculum instill behaviors to reduce harmful sports consumption?	1.68	54.90*	66.67	2
6	Does the curriculum include practical situations for teaching environmentally friendly decision-making?	1.66	51.85*	64.13	5
7	Is the culture of "clean sports" promoted environmentally and behaviorally?	1.67	51.74*	61.33	3
8	Are there educational activities or situations that promote environmental teamwork?	1.48	44.90*	60.64	8

Ka2 value is statistically significant at the 0.05 level = 4.90 with 2 degrees of freedom. Ka2 value is statistically significant at the 0.05 level = 3.31 with 1 degree of freedom. Likert Scale: Weighted mean interpretation: 1.00-1.66 (No), 1.67-2.33 (Somewhat), 2.34-3.00 (Yes).

Discussion:

Table (6) shows the weighted mean of the study sample's attitudes towards the inclusion of green economy concepts in physical education curricula at the preparatory stage under the sixth axis (Values and Behaviors). The weighted mean for the statements ranges from 1.48 to 1.96, and the statistical significance (Ka2) ranges between 44.90 and 56.37. Statement number 3, "Does the curriculum develop the learner's behavior in preserving the cleanliness of sports facilities?" received the highest weighted mean of 1.96, with a relative weight of 69.38, ranking first among statements related to values and behaviors.

The lack of inclusion (Yes) can be attributed to the following factors:

- 1. Skills Are Taught in Isolation: Sports skills are taught as physical performance, with no connection to environmental values. The curriculum does not link mastering skills to environmental preservation or fostering positive behaviors.
- 2. Absence of Environmental Objectives in the Curriculum: Environmental educational objectives are not included in the physical education curriculum plans, and teachers are not trained to integrate environmental concepts into daily practices or behavior.
- **3.** Lack of Focus on Facility Cleanliness: Maintaining cleanliness in sports facilities is not included as part of the curriculum or evaluated as a specific learning outcome. It is left to general school practices.
- 4. No Mention of Interaction with Natural Environments: The curriculum does not contain content or activities emphasizing positive interaction with natural or open environments, nor does it address

the environmental impact of sports activities on these areas.

- 5. No Focus on Reducing Harmful Consumption: The curriculum does not provide examples or guidelines for reducing the use of environmentally harmful materials or resources, such as plastics or excessive water consumption.
- 6. No Practical Environmental Decision-Making Activities: There are no educational activities focused on simulating or solving environmental problems, and environmental thinking is not cultivated as a skill in physical education.
- 7. Lack of "Clean Sports" Culture: The concept of "clean sports" is often misunderstood as a counterpart to "fair play" in competitions and is not addressed from an environmental perspective, such as preserving the environment, equipment, or resources.
- 8. Limited Environmental Teamwork Activities: While sports activities promote teamwork, there is no clear focus on environmental goals, such as cleaning sports facilities or executing environmental projects related to sports.

This analysis aligns with the findings of Hamza (2020), who concluded that values and behaviors related to environmental sustainability could be easily integrated into curricula through linking sports activities with real-life environmental situations. The absence of integration between cognitive, emotional, and skill-based objectives is a root cause, and the lack of environmental training for teachers is a significant factor contributing to the absence of these behaviors in practical application.

2. What are the environmental and educational dimensions that can be integrated into these curricula?

Based on the previous presentation and analysis, the researcher suggests the following environmental and educational dimensions that can be integrated into the physical education curricula in light of the green economy approach:

First: Environmental Dimensions:

1. Environmental Awareness

- Enhance students' understanding of the relationship between sports and environmental protection.
- Raise awareness about the risks of pollution resulting from unsustainable sports activities.

2. Natural Resource Management

- Teach ways to conserve water and energy in sports facilities and stadiums.
- Use eco-friendly or recyclable sports equipment.

3. Sustainable Practices

- Integrate concepts such as reuse, recycling, and reducing carbon footprints.
- Implement environmental sports activities, such as awareness races or cleanup campaigns.

4. Environmental Planning for Sports Facilities

- Design sustainable sports fields, using renewable energy sources (such as solar energy).
- Adopt eco-friendly building materials for sports infrastructure.

5. Sports Waste Management

• Establish mechanisms to sort and recycle waste generated by sports events.

Second: Educational Dimensions:

1. Education for Sustainable Development

- Link sports with values of responsibility, environmental citizenship, and community participation.
- 2. Project-Based Environmental Learning
 - Design student projects that serve both the community and the environment.
- 3. Developing Environmental Attitudes and Behaviors
 - Promote positive behaviors such as respecting sports environments and maintaining cleanliness.
- 4. Integrating Environmental Knowledge Across Subjects
 - Connect sports sciences with environmental sciences, public health, physics, and geography.

5. Training in Environmental Leadership in Sports

- Prepare students to be environmental ambassadors in clubs, schools, and communities
- 3. Leading Global Models for Integrating Green Economy into Physical Education with some key global models:
- 1. Eco-Schools Program Foundation for Environmental Education (FEE) (15)
 - Country: Over 70 countries worldwide

- Field: All disciplines, including physical education
- Principles:
 - Encourage schools to use sports in environmental projects, such as "Environmental Awareness Marathons."
 - Integrate sports into recycling initiatives and stadium cleanups.
- Advantages:
 - Linking sports activities with collective environmental action.
 - Awarding schools with the Green Flag for environmental excellence.
- 2. Green Olympic Initiative International Olympic Committee (IOC) (17)
 - Country: Various countries during the Olympic Games
 - Focus: Sports for sustainable development
 - Examples:
 - The Tokyo 2020 Olympic Games were the "greenest" Olympics, with medals made from recycled electronic waste.
 - Renewable energy and reusable facilities were used.
 - Lessons for Curricula:
 - The possibility of integrating these principles into sports training curricula and planning school sports events.

3. Active Schools, Healthy Schools Program – Canada (18)

- Country: Canada
- Goal: Improve students' health while considering environmental dimensions
- Activities:
 - Encourage active commuting (walking/biking) to school instead of using cars.
 - Hold sports events in green open spaces.
- Benefit for Curricula:
 - Using sports to reduce carbon footprints and raise environmental awareness.
- 4. University Initiatives in the United Kingdom (Green Sports Alliance & UK Active Green) (16)
 - Country: United Kingdom
 - Field: Higher education (Physical education and sports sciences)
 - Activities:
 - Incorporating environmental management courses in sports.
 - Developing green sports activities in universities.

Key Highlights:

- Graduation projects for sports students focused on "sports and the green economy."
- Evaluating students based on sustainable sports initiatives.

The researcher concludes by presenting these models that they demonstrate broad potential for integrating the green economy into physical education through:

• Curricula

- Classroom and community activities
- Facilities and infrastructure
- Evaluation and outcomes
- 4. Proposed Future Vision for Developing These Curricula in Light of Sustainable Development Requirements
 - Proposed Vision for Developing Sports Science Curricula in Line with Sustainable Development Requirements:
 - Build comprehensive sports curricula that contribute to preparing an environmentally aware generation capable of practicing sustainable physical activities, balancing health, environment, and economy in alignment with the UN's 2030 Agenda for Sustainable Development.
 - Establish a sports education system that promotes environmental and professional awareness among students, enhancing their participation in achieving environmental and community goals through interactive content, practical practices, and continuous assessments that align with Sustainable Development Goals (SDGs).

Core Elements of This Vision:

- 1. Full Integration of Sustainable Development Concepts:
 - Reinforce concepts such as environmental justice, resource conservation, quality of life, and the circular economy within sports curricula goals and content.
- 2. Designing a Green Sports Educational Environment:
 - Develop school sports facilities to be environmentally friendly (solar energy, ecofriendly tools, waste management).
 - Promote the use of sustainable technologies in sports training.
- 3. Enhancing Community-Oriented Practical Aspects:
 - Connect students with green sports initiatives at the community level (campaigns, competitions, green marathons).
 - Encourage green entrepreneurship in sports.

4. Restructuring Activities and Evaluation:

- Include field activities and projects serving sustainable development goals.
- Adopt assessments that include environmental, behavioral, and community outcomes.
- 5. Training Educators on Sports and Environmental Education:
 - Provide sports educators with training on green economy concepts and environmental teaching strategies.
 - Foster partnerships between ministries of education, environment, and sports.

Vision Pillars:

- 1. Reformulating Educational Objectives for Curricula:
 - Goal: Integrate sustainable development concepts into learning outcomes (environment, economy, health, justice).
 - Examples:
 - Cambridge University, UK: The course "Sports and Society" includes goals such as reducing the environmental footprint of sports events.
 - Green Schools in Germany: Set objectives like "Developing environmental responsibility through physical activity."

2. Developing Content to Include Green Concepts:

- Goal: Include concepts like:
 - Water and electricity conservation in sports halls.
 - Recycling sports equipment.
 - Environmental health and fitness practices.
- Examples:
 - College of Sports Science University of Munich: Offers the course "Sports and Sustainability," covering environmental challenges in organizing sports events.
 - Eco-Schools: Distribute brochures on "Outdoor Sports and Biodiversity Protection."
- 3. Designing Sustainable and Community-Oriented Sports Activities:
 - Goal: Play sports as a tool for environmental awareness (e.g., cleaning stadiums, planting trees, environmental races).
 - Examples:
 - University of California: Organizes
 "Marathons for the Environment" on campus.
 - Schools in Finland: Conduct sports activities that link fitness with environmental work (e.g., collecting waste during a run).

4. Improving Sports Education Environments and Facilities:

- Goal: Build eco-friendly sports facilities.
 - Rely on solar energy, water recycling systems, and natural ventilation.
- Examples:
 - American University of Beirut: Uses energyefficient lighting systems and partially solarpowered sports halls.
 - Active Schools in Canada: Use recyclable flooring and green sports equipment.

5. Developing Teaching and Evaluation Strategies:

- Goal: Integrate environmental teamwork, presentations, and mini projects.
 - Evaluate environmental behaviors and green leadership in sports.
- Examples:
 - College of Physical Education University of Oslo: Evaluates students based on their implementation of "Sustainable Sports Event Management."

- Schools in Japan: Use digital portfolios to document student participation in environmental sports activities.
- 6. Training Teachers and Building Partnerships:
 - Goal: Prepare teachers on green economy concepts.
 - Partner with environmental and sports organizations for institutional integration.
 - Examples:
 - Training courses at the University of Sydney: For teachers in "Sports and Environmental Education."
 - Ministry of Education's partnership with WWF in several European countries to implement awareness campaigns in sports schools.

Conclusions:

- Weakness in Systematic Integration of Green Economy Dimensions: Physical education curricula at the preparatory stage level lack sufficient inclusion of green economy concepts such as resource efficiency, renewable energy, and sports waste management.
- Absence of Integration Between Sports and Environmental Issues in Educational Content: Curricula do not address the direct links between physical activity and environmental sustainability, such as respecting ecosystems or designing sustainable sports facilities.
- Lack of Environmental Practical Application in Educational Activities: There is a weakness in the existence of practical projects or field environmental campaigns within sports activities, which limit students' awareness of sustainability concepts.
- Limited Evaluation Tools to Measure
 Environmental Aspects: Current evaluation tools do

not assess students' environmental awareness or their application of green practices in the sports context, nor do they include environmental performance indicators or environmental achievement portfolios.

Recommendations:

- 1. Redesigning Physical Education Curricula to Include Green Economy Dimensions:
 - Develop content to include concepts such as recycling, clean energy, sports and environmental health, and reducing carbon footprints, with both local and global examples.

2. Integrate Field-Based Environmental Activities:

- Such as cleaning sports fields, resource conservation during sports activities, environmental awareness campaigns, and using recycled sports tools.
- 3. Design Modern Evaluation Tools to Measure Sports Environmental Behavior:
 - Including performance assessments, environmental achievement portfolios, and group projects integrating sports, community, and the environment.
- 4. Provide Teacher Training Programs on Green Economy in Sports:
 - Train educators on how to integrate sustainability concepts into lessons, activities, and evaluations.
- 5. Enhance Partnerships with Successful International Initiatives:
 - Such as the Eco-Schools program and the Green Olympic initiative, to exchange experiences and adopt inspiring environmental sports projects.
- 6. Encourage Scientific Research in "Sports and Environment":
 - Support studies that evaluate the environmental impact of sports activities and provide sustainable educational sports models.

References:

Arabic References:

- 1. Eman Ibrahim Salem (2020). "Content Analysis of Physical Education Curricula in Light of 21st Century Skills," Journal of the Faculty of Physical Education, Helwan University, 41(2), 55–71.
- 2. Hussein Mahmoud Al-Azouni (2022). "Content Analysis of Physical Education Colleges Curricula in Light of Sustainable Development Principles," International Journal of Physical Education and Sports, 22(1), 45–60.
- **3.** Abdul Rahman Abdullah Naim (2020). "Towards an Environmentally Friendly Sports Curriculum: A Proposed Framework for Integrating Green Economy Dimensions," Journal of Sports Sciences, University of Baghdad, 12(3), 88–104.
- **4. Abdullah Ahmed Al-Sayed (2019).** "Foresight in Curriculum Development," Journal of Educational Studies, 30(4), 45–60.
- 5. Ali Mohammed Abdelaziz (2019). "Green Economy and Education Curricula: A Vision for Development," Journal of Education and Development, 45(2), pp. 66-81.
- 6. Mohammed Ali Hassanein (2011). "Foundations of Building Sports Curricula," Arab Thought House.
- 7. Mona Saeed Hamza (2020). "Environmental Education and the Green Economy Approach in Education," Journal of the Faculty of Education Ain Shams University, 44(4), 215–238.

Foreign References:

- 8. Hopwood, B., Mellor, M., & O'Brien, G. (2005). "Sustainable development: mapping different approaches," Sustainable Development, 13(1), 38–52.
- **9.** Schulenkorf, N (2017). "Managing Sport-for-Development: Reflections and Outlook," Sport Management Review, 20(3), 243–255.
- **10. UNEP (2011).** "Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication," United Nations Environment Programme.
- 11. UNESCO (2024). "Greening every curriculum: Guidance to teach and learn for climate action." Link.
- 12. UNESCO (2021). "Education for sustainable development: A roadmap," United Nations Educational, Scientific and Cultural Organization. Link.
- 13. United Nations (2015). "Transforming our world: The 2030 agenda for sustainable development." Link.
- 14. World Commission on Environment and Development (2024). "Our Common Future: 2024 Update," United Nations Publications. Link.

Websites

- 15. Eco-Schools Global https://www.ecoschools.global
- 16. Green Sports Alliance https://greensportsalliance.org
- 17. Olympics Sustainability https://olympics.com/ioc/sustainability
- 18. Active Schools, Healthy Schools Ontariohttps://www.ontario.ca/page/active-schools-healthy-schools
- 19. UNESCO Documenthttps://unesdoc.unesco.org/ark:/48223/pf0000247444