

# Updating Curricula of Iraqi Higher Education Institutions & SDGs Achievement

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## Abstract

Education, being an essential requirement to achieve the Sustainable Development Goals (SDGs), curricula life. Accordingly, most Higher Education Institutions have paid much attention to modernize curricula due to their positive impact on the progress of societies, in addition to identifying and internalizing the role of employees in the accomplishment of SDGs. They should be aware that their environment is the shelter that they are assumed to protect and preserve. Therefore, the goals related to people's environment have been widely explored in the updated curricula as they work on meeting the learners' needs, their concerns, and developing meanwhile their skills of different directions. Nonetheless, the curricula of some Iraqi Higher Education Institutions still do not include materials that are consistent with the learners' tendencies and their abilities as well as the essential requirements of society. Hence, these curricula have failed to achieve the main strategies of learning because they have been concentrating on specific topics that only assist students to shift from one study stage to another. The process of updating the curricula of Iraqi Higher Education Institutions, as per the researcher's viewpoint, is considered as part of the UN Sustainable Development Goals, when applied, whether now or in the future, they shall change the role of academics as well as students, creating meanwhile some type of link between educational, productive and service institutions, and thus connecting education with life and acquisition of labor skills, being essential factors that lead to promoting the concept of curriculum. The researcher has adopted a descriptive approach focusing in his survey on a sample of 68, he has come up with the following conclusions: Most updated items of the curricula assist in achieving the Sustainable Development Goals. Higher Education Institutions participate in supporting and encouraging transfer of appropriate advanced technologies so as to achieve Sustainable Development Goals. Besides, we have come up with the following recommendations: It is quite necessary to update the curricula according to their objectives and outcomes for the purpose of achieving SDGs in face of current and future challenges. Establishing an infrastructure for financing and implementing curricula that could enable students to contribute in achieving the Sustainable Development Goals. integrating the SDGs with the environmental, social, cultural and scientific objectives.

## Keywords:

## 1.1 Introduction

Education is considered as an attainment that every individual shall obtain to achieve success in life, in addition to being an essential requirement for achieving Sustainable Development Goals. Most Higher Education Institutions have paid much attention to modernizing curricula as they have positive impact on the advancement of societies, reinforcing the feeling of citizenship and belonging to community. The modern trends of curricula assume that a learner, being a fundamental element in the educational process and its main target, he shall occupy an active role in the process. Besides, new teaching strategies shall be adopted when constructing the curricula since methodology is a main income, exchanging effect with other incomes, considering the teaching process as an integrated mechanism, which has its own objectives, incomes and outcomes.

All educators, however, agree that curricula has an essential and active role on citizens, as they participate in educating and developing the youth to become responsible members in their communities since these curricula represent a combination of scientific, cultural, social and technical experiences that are carefully designed and prepared by educational institutions so as to be submitted either individually or collectively for the purpose of achieving comprehensive growth of learners, in addition to amending their behaviours as per the required educational objectives.

Besides, Curricula seek to establish and internalize the effective role of Higher Education employees in the achievement of Sustainable Development Goals. They should realize that their environment is the safe shelter that they should protect and maintain, and therefore, its goals have been widely explored in the curricula, being educationally valuable in meeting the learners' needs and concerns and promoting their divergent skills, based on the applied directives of the Ministry of Higher Education & Scientific Research.

Finally, the importance of such research, which mainly focuses on refurbishing and renewing Higher Education Curricula, lies in meeting the requirements of all majors through the various study stages, leading at the end to achieving the UN SDGs.

## 1.2 Research Problem

Most countries do revise the curricula of their educational institutions, activating them on realistic bases through the application of modern systems that keep pace with world advancement of different life aspects in a way that could enable employees to promote their capabilities with which they would successfully handle and implement the curricula as per the Sustainable Development Goals.

It is considerable to note that the curricula of some Higher Education Institutions in Iraq still do not include materials that could reflect learners' tendencies and abilities or meet the needs of society. Hence, these institutions have failed to achieve the required objectives due to focusing on subjects merely necessitating transfer of students from one stage to another. These students indeed have become no more than listeners and negative recipients to the academic courses, whereas the teacher, being the center of knowledge, is the one who is in charge of thinking and organizing everything.

The researcher believes that updating curricula of Iraqi Higher Education institutions is an ideal route towards achieving the Sustainable Development Goals that shall definitely lead to changing the roles of academics and students, associating these institutions with productive and service establishments, linking education to life and to acquisition of labor skills. Thus, a new promoted concept of curricula shall come into existence.

## 1.3 Research Objective

The research aims to update the curricula of Iraqi Higher Education Institutions through the achievement of Sustainable Development Goals.

## 1.4 Fields of Research

Fields of research can be classified into three types. They are as follows:

- 1.4.1 Human Field: it includes MUC Academics
- 1.4.2 Time Field: it covers the period starting on 1<sup>st</sup> of November 2022 and ending on 1<sup>st</sup> February 2023
- 1.4.3 Location Field: Al-Mustaqbal University College, Babylon, Iraq

## 1.5 Terminology

The essential terms required for the current research are as follows:

- 1.5.1 Updating: it is the process of entering recent data and information into the curriculum for the purpose of changing or promoting the existing material (Al-Rubaie, 2016).

- 1.5.2 Curriculum: it is an educational plan, which is constituted of objectives, content, experiences, teaching methods and approaches derived from philosophical, social, psychological, and cognitive issues related to learners and their community. All aspects of the curriculum are assumed to be applied inside and outside the educational institution with the intent to achieve an integrated growth of the learner's personality covering his mental, emotional and physical aspects (Ibrahim, 2004).
- 1.5.3 Sustainable Development: it shall meet the requirements of the present time without jeopardizing future generations and their needs (Al-Rubaie, 2021).
- 1.5.4 Sustainable Development Goals: all countries, whether rich or poor shall strive to reinforce flourishing, taking into consideration the priority of protecting our planet. Besides, it shall be kept in mind that the eradication of poverty, being one of these goals, has to be in line with specific social needs, including education, health, communal protection, employment, in addition to treatment of climate change and preservation of environment.

## 2. Research Methodology & Field Procedures

### 2.1 Research Methodology

The researcher has used a descriptive approach on a survey study style due to the nature of the research problem, building the scale and investigating the case.

### 2.2. Community & Sample of Research

The research community has included 68 academics of Al-Mustaqbal University College for the academic Year 2022 – 2023. As for the experimental sample, it has included 18 academics with a percentage of 26.47% who has been selected haphazardly, whereas the application sample has incorporated 40 academics with a percentage of 58.83%. Ten academics have been excluded for not responding with a percentage of 14.07%.

### 2.3 Scale Items

A scale of 71 items has been used, and these items are distributed to the various goals and as shown in the table given below:

| #                     | Goal                  | Number of Items |
|-----------------------|-----------------------|-----------------|
| 1.                    | Social                | 21              |
| 2.                    | Health                | 16              |
| 3.                    | Environment           | 15              |
| 4.                    | Cultural & Scientific | 19              |
| Total Number of Items |                       | 71              |

(Table No. 01: Number of Items for Each Scale)

Items have been assessed according to a scale of three levels: Fair: 01 Degree; Good: 02 Degrees; Excellent: 03 Degrees. The assessment process has covered the application sample, which includes 40 Academics. The score given to each item ranges between 120 as maximum and 40 as minimum (Appendix No. 01).

### 2.4 Experimental Sample

The researcher has applied the scale on the experimental sample constituted of 18 academics on 15<sup>th</sup> December 2022

### 2.5 Main Experiment

The main experiment has been implemented on the application sample, which consists of 40 academics on 19<sup>th</sup> December 2022.

### 2.6 Statistical Tools

SPSS Software has been adopted to accomplish the research.

### 3. Presenting, Analyzing & Discussing Research Results

#### 1.1 Presentation of Research Results

Table (2) shows the score of the curriculum scale items, as per the SDGs perspective.

| #                        | Items & Objectives Scale of Updated Curricula   | Score |
|--------------------------|---|-------|
| First: Social Dimension  |   |       |
| 1.                       | The student participates in promoting the spirit of tolerance, love and brotherhood among his colleagues.   | 90    |
| 2.                       | The student shall contribute with his colleagues in voluntary cleanliness campaigns, such as cleaning Worship Places, Elderly Houses and Orphanages.  | 76    |
| 3.                       | The student participates in writing topics on the impact of social values in developing the individual's behaviour as well as the community.  | 82    |
| 4.                       | Tender feelings and mercifulness shall be essential in a student's behaviour when dealing with others.  | 75    |
| 5.                       | The student shall be proud of being loyal to his country and society.   | 78    |
| 6.                       | All community members shall be harmonized and unified when treating and solving their problems.   | 72    |
| 7.                       | The student shall reject injustice, tyranny, racial as well as sectarian discrimination among society members.  | 80    |
| 8.                       | Serving and respecting the elderly shall be part of one's personality, and accordingly, we could benefit from their experiences.  | 84    |
| 9.                       | The student is required to acquire some of life skills, such as communication, team work, adhering to rights and performing duties.   | 83    |
| 10.                      | The student shall get acquainted with the main features of homeland and citizenship, showing sincere respect to different cultures.   | 82    |
| 11.                      | Acquisition of moral values while tackling and practicing educational conventions.  | 85    |
| 12.                      | The student practices his rights and responsibilities as per the texts of the Constitution.   | 76    |
| 13.                      | The student shall work with others to ensure equitable social rights that are inclusive for all, and promoting them for longer life.  | 80    |
| 14.                      | The student shall have a role in achieving equality among his friends and colleagues.   | 82    |
| 15.                      | Students shall reinforce comprehensive and sustainable social development, maintaining a decent life for everybody.   | 78    |
| 16.                      | The student seeks to provide opportunities for success, expanding the scope of preparation for services and facilities, and participating in the civilized growth of community.                 | 82    |
| 17.                      | Students shall have an effective role in the process of achieving justice, in addition to establishing competent institutions that are accountable and inclusive for the student and community. | 75    |
| 18.                      | Creating equal opportunities for the community members.   | 75    |
| 19.                      | Encouraging for the establishment of peaceful and inclusive communities, and thus achieving the Sustainable Development Goals.  | 73    |
| 20.                      | Students are bound to comply with the rules and regulations of his daily life.  | 72    |
| 21.                      | The student shall participate with his colleagues in the public services of his community.  | 80    |
| Second: Health Dimension |   |       |
| 1.                       | The student shall have a role in eradicating hunger, providing food security, improved nutrition, and reinforcing sustainable health.   | 80    |

|                                |   |    |
|--------------------------------|---|----|
| 2.                             | Students shall participate in raising health awareness, and paying more attention to the concept of "Preventive Medicine".  | 85 |
| 3.                             | Organizing training courses for first aid on treatment of wounds, burns and fractures.  | 80 |
| 4.                             | Students may participate in implementing banners, images and guiding boards that encourage for health care.   | 72 |
| 5.                             | Students shall contribute in raising awareness among their local communities on how to preserve health of society.  | 80 |
| 6.                             | Students are assumed to have a role in improving health services and everybody shall have access to these benefits.   | 72 |
| 7.                             | A student shall have some kind of a role in insuring healthy life for all community members.  | 72 |
| 8.                             | A student shall participate in developing physical abilities through practicing sports activities as essential procedures to reinforce one's health.                                      | 82 |
| 9.                             | Students participate in submitting First Aid Services.  | 75 |
| 10.                            | A student shall accept the physical and physiological changes that may occur to his body, considering them as normal matter for his growth and health.                                    | 80 |
| 11.                            | Students shall take care of both physical as well as psychological health.  | 80 |
| 12.                            | Students shall pay more attention to practicing physical and sports activities so as to enhance the body system functions.  | 84 |
| 13.                            | Students shall keep on performing their sports activities in order to maintain the stability and soundness of muscles and joints.   | 78 |
| 14.                            | A student shall refrain from smoking as it has very bad effect on health.   | 75 |
| 15.                            | A shall not participate any type of sports activity directly after eating food due to being an unhealthy habit.   | 82 |
| 16.                            | A student shall know how to perform certain exercises that could develop one's physical fitness.  | 80 |
| Third: Environmental Dimension |   |    |
| 1.                             | The student shall have a role in increasing environmental awareness among community members.  | 78 |
| 2.                             | Reducing emissions caused by polluting sources, in addition to preventing random burning.   | 82 |
| 3.                             | The student is required to get acquainted with his environment, its components and features, along with the natural phenomena and how to preserve the habitat with its resources.         | 88 |
| 4.                             | Use of friendly environment technology when treating solid waste and other polluting materials.   | 84 |
| 5.                             | Students are assumed to have a plausible role in the environmental planning of lakes and beaches  | 83 |
| 6.                             | Ensuring and enhancing the role of inspecting as well as controlling the environment, building and establishing the required abilities in the field of advanced environmental monitoring. | 81 |
| 7.                             | Students are required to contribute in organizing competitions that lead to raising environmental awareness among the institutions as well as the citizens of the State.                  | 78 |
| 8.                             | Investigating the problems related to environmental pollution and recommending certain solutions.   | 87 |
| 9.                             | The student shall realize that man is part of the environment with mutual interaction between them.   | 75 |
| 10.                            | Students have to participate in teams that work on spreading environmental culture among the community members.   | 82 |
| 11.                            | Identifying positive trends in protecting environment of pollution  | 90 |
| 12.                            | Students shall be competent in using the materials that do not harm environment.  | 88 |
| 13.                            | Students have to get acquainted with the benefits of life in their surrounding environment.   | 87 |

|  |  |    |
|--|--|----|
| 14.  | The student has to participate in a group of activities to maintain safe and clean environment.  | 86 |
| 15.  | Students shall work on designing artistic samples as part of participating in the maintenance of environment.  | 77 |
| <b>Fourth: Cultural &amp; Scientific Dimension</b> |  |    |
| 1.   | The student is assumed to encourage community members for innovation.  | 85 |
| 2.   | Students shall aim to support and encourage transfer of modern technology as part of achieving Sustainable Development Goals.  | 82 |
| 3.   | Students are assumed to attend scientific conferences and participate in projects with their teachers on environment.  | 78 |
| 4.   | Students shall have a role in supporting talented people.  | 80 |
| 5.   | Students are supposed to have some kind of a role in revising the curricula so as to be more reinforcing for thinking and innovating.  | 88 |
| 6.   | Students shall participate in designing cultural training programs for all study stages regarding the importance of Arab as well world cultures and how to be developed.                                       | 82 |
| 7.   | Students shall contribute in the processes of producing renewable energy.  | 78 |
| 8.   | The student seeks to preserve the religious and cultural heritage, and using them to achieve sustainable development.  | 78 |
| 9.   | Enhancing higher capabilities for innovative thinking and love of revival.   | 85 |
| 10.  | Students adopt a scientific thinking in solving all types of problems, whether personal or shared.   | 82 |
| 11.  | Students should get acquainted with modern technology, in addition to having the knowledge and skill of using it.  | 80 |
| 12.  | Any student shall have the skills of innovation and renewal that are required for artistic and cultural festivals.   | 85 |
| 13.  | A student participates in scientific innovations using materials from his local environment.   | 80 |
| 14.  | A student within a team shall participate in implementing one of the sustainable development projects that serves his community.   | 80 |
| 15.  | A student is required to discuss with his colleagues one of the local or Arab environmental issues along with the achievements in this regard.   | 75 |
| 16.  | The student shall have a role in the establishment of a resilient infrastructure in which inclusive and sustainable industrialization is stimulated. Encouragement for innovation shall be taken into account. | 77 |
| 17.  | A student shall encourage his colleagues to participate in cultural and scientific festivals, focusing on how to show up talents that could be somehow beneficial to the country.                              | 83 |
| 18.  | The student shall use modern technologies when communicating with his colleagues.  | 81 |
| 19.  | Students shall participate in organizing seminars on modern changes and their positive as well as negative impacts.  | 84 |

## 1.2 Analysis & Discussion

It is remarkable to note that Table No. 02 has included 71 items, which all focus on the requirements related to updating curricula, and consequently leading to achieving Sustainable Development Goals. Indeed, social, environmental, cultural and scientific issues, being part of the updating process of curricula, are real challenges, resulting from constant interaction between man and his surrounding environment with the available resources that constitute the basis for a stable relationship between the two. (Al-Rubaie & Majdi, 2021, P. 45 )

When defining “development”, scientists often reflect it on the environmental dimensions, and how to protect nature from all types of pollution. In conclusion, we may say that the aforementioned dimensions, as detailed in



Table No. 02, are expressed with divergent viewpoints, taking into account the balance among the major areas of sustainability.

If the issue concerns the protection of environment, prevention then is much cheaper and more effective than treatment. Undoubtedly, Most countries nowadays attempt to mitigate potential harm on the infrastructure that result from new investments. These efforts are carried out through careful scientific guidance while selecting solutions, bearing in mind both costs and benefits when designing the energy strategies. The environment therefore is taken as an effective element within the structure that includes all aspects of life. (Salmi Rasheed, 2006, P. 115).

Sustainable development is based on a set principles, which constitute the ground for achieving a luxurious life for people without compromising the rights of future generations. These principles are as listed below:

- Efficient Use of Resources
- Flexibility
- Reserve
- Justice
- Pollutant Motive
- Partnership
- Integration

Leaders of educational institutions shall realize that modern curricula is the gate that leads to inclusive evolution, and the basis for achieving sustainable development goals. It is remarkable to note that higher education mainly depends on its cadre who are considered as the most important tool in promoting all aspects of the educational process.

All experts and specialists have agreed that the dimensions scale with their items are in harmony with the general trend that aims to achieve the sustainable development goals. For instance, the sample subjects, when replying to the 21 items of the Social Dimension, have achieved 79.048%. These items have mainly concentrated on improving the level of social protection, participating making the decisions that might influence the lives of community members, with specific emphasis on the elements of justice and equality. In other words, people shall have equal opportunities in obtaining natural resources and social services. Furthermore, the dimension in questions intends to increase individuals' capabilities in using the available energy to the extent of creating free and luxurious environment.

The 16 items of Health Dimension, on the other hand, have achieved 78.56% of the sample subjects' replies. It is quite obvious that all items of this dimensions are of essential importance as they focus on health, safety and quality. However, a number of inquiries have been raised, regarding the practical application of sustainability concepts in healthcare facilities, and whether these concepts are compatible with these competencies. We believe after all that there is a gradual alteration towards this trend as people are realizing the great benefits of sustainability.

The 17 goals that have been set by the United Nations do represent indeed the sustainable development that shall be applied by all countries, and thus symbolizing some form of an agreement among nations. It is almost approved by everybody that Sustainable Development Goals address a wide range of issues that shall finally lead to positive and healthy status of our global community.

Most curricula of all stages seek to promote health service, in addition to protecting the natural resources with the reasonable exploitation of agricultural land and water. Accordingly, specialists who are in charge of developing curricula, shall work on modernizing them so as to be consistent with the scientific and technological progress, keeping an eye on

1. Preservation of water and energy used in the fields of agriculture and industry.
2. Strengthening and stimulating economy with the green development, and incorporating them in the school curricula as well as students culture.
3. Supporting and maintaining all types of institutions, social, health, environmental, cultural and scientific, having an effective role in in their advancement.

It should be noted here that the "Food and Agriculture Organization" (FAO) has confirmed that development is reflected in the processes of managing and protecting natural resources, directing the technical and institutional changes in a way that ensures constant provision of human needs whether for the present or future generations. The curricula of educational institutions, being a genuine reflection to aspects of life, are assumed to contain all intellectual as well as social currents prevailing in society, and thus realizing the essential role of education.

All sustainable development goals that cover all aspects of environment, society and economy shall be integrated for the achievement of natural health. As a matter of fact, sustainable health care is a complicated system of interactive approaches that leads to establishing an ecological base, being environmentally, economically and socially sustainable. Such inclusive approach undoubtedly shall unify many strategies under the umbrella of sustainable health care.

However, progress towards sustainability in the field of health care can be accelerated through the application of specific laws, clear mandate requirements and implementation processes, in addition to incentives that could compensate or counterbalance initial costs. Adoption of these procedures shall definitely provide good opportunities to articulate and broaden the interpretation of sustainability towards practices related to design and construction.

The environmental dimension with its 15 items that has achieved the highest score (83.07%), covering natural resources of water, energy, agriculture and biological diversity, is considered as the backbone of sustainable development. Indeed, a reconciliation process between development of economy and environmental preservation is highly required. Meanwhile, the rights of present and future generations shall be taken into consideration.

Sustainable development aims to achieve a number of environmental goals, such as

1. Rational use of depleted resources, i.e. natural assets shall be preserved so that a similar environment is left for future generations.
2. Taking into account the limited capacity of environment in containing waste.
3. Determining accurately the quantity that shall be utilized of the depleted resources, depending on true economic value and appropriate price.

If we move to the cultural and scientific dimension whose 19 items have achieved 81.21%, we could easily determine that this result indicates a positive attitude towards raising the income of both the State and the individual all together with improving the standard of living. This could be achieved through the dissemination of culture and various sciences in the curricula of higher education institutions as they are the cornerstone of any real development and a main reason for the advancement of nations. As a matter of fact, modernized curricula are the most important tools that humans can use to achieve success in their lives.

There is no doubt that the main target of higher education is the human being, and everything related to him, such as community, culture, ambitions and hopes. In other words, higher education concerns the society with all its individuals, systems and institutions. Accordingly, it has a humanitarian nature, in charge of accomplishing different types of tasks that almost touch every aspect of human's life, intellectual, cultural, moral, political and economical. Intellectually, the individual is assumed to positively think of his life issues, capable of using his developed skills in solving them appropriately, whereas morally, he is committed to promote and internalize the values of his community. Economically, higher education aims to develop qualified and well-trained human resources that can be relied upon in building the economy. As for the cultural aspect, it has to be analyzed and evolved on the basis of realizing all changes and evolutions.

Another role of higher education is to enable individuals to adapt to life as a community member, being normalized by the family and the tribe. In addition, it should taken into consideration that societies are changeable. Based on this fact, higher education curricula shall be flexible in a way that they could deal with the dynamic factors of society.

Modernizing curricula as a means of achieving Sustainable Development Goals shall take into account as well the most suitable methods and techniques that can be adopted in nurturing talented students so as to enable them acquire specific skills, such as accurate observation, broad perceptions, in addition to being equipped with knowledge and experiences.

Finally, we may say that all the aforementioned dimensions and as detailed in Table No. 02 are quite necessary and essential for modernizing Higher Education Curricula. They shall be taken as an integrated and unique entity that could evolve the various aspects of the educational process. Undoubtedly, the Sustainable Development Goals are there in the heart of total operation.

#### **4. Conclusions & Recommendations**

Our conclusions and recommendations shall be listed in the forthcoming sub-sections.

##### **4.1 Conclusions**

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Our conclusions are as listed below:

1. Most dimensions and items of modernized curricula shall lead to achieving the sustainable development goals.
2. Educational curricula encourage for the establishment of peaceful and inclusive communities.
3. Educational curricula intend to raise health and environmental awareness and what procedures to be followed in order to preserve these essential aspects, namely health and environment.
4. Higher Education Institutions contribute in supporting and encouraging transfer of feasible modern technology that leads in turn to achieving the sustainable development goals through modernizing and updating their curricula.
5. Educational curricula are posited to fight and eradicate bad and harmful habits in society and in accordance with the SDGs.
6. The Social dimension has an essential importance in accomplishing the SDGs, such as democracy, and provision of health, education and population growth. The latter could be taken as a means of integration.
7. Educational curricula keep on addressing the student since they provide him with a wide area of observation, thinking, comprehension, exploration, innovation and expanding information.
8. The environmental dimension has gained priority due to its role in fighting all types of pollution.

## 4.2 Recommendations

Below are our recommendations:

1. It is quite necessary to update curricula as per their dimensions and items so as to achieve the sustainable development goals and face current and future challenges.
2. Providing new type of curricula for all study stages appropriate and can match and satisfy the SDGs requirements.
3. Establishing an appropriate infrastructure where a modernized curricula can be efficiently accomplished.
4. The educational curricula shall be taken as an instrument that can be used for training individuals as part of reforming society and applying the SDGs.
5. Emphasizing on qualifying leaders for educational institutions who could positively influence students.
6. Educational curricula should have a positive impact on students, enabling them to properly deal with life issues and develop their skills and abilities.
7. Promoting the spirit of responsibility and team work among students, combining values and personal beliefs with the behaviour that leads to sustainability.
8. Students shall have a role in preserving and maintaining natural resources, environment and society.
9. Integrating all SDGs on behalf of public health.

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