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Evaluating the physical education and sports curricula for the secondary level using information technology requirements

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ABSTRACT:

We, the researchers in this study, aim to understand the role played by technological devices and equipment in evaluating the physical education and sports curriculum for secondary school students, as well as to identify the role of technological software and data in evaluating the curriculum itself based on what is offered at the secondary education level.We adopted a descriptive analytical approach with a research sample consisting of 35 male and female secondary school teachers in the municipality of Biskra, representing 41% of the research population. The sample was randomly selected using a stratified method, using a questionnaire as the study tool.

Keywords: Requirements for evaluating, physical education, secondary stage

1-Introduction to the Study :

In recent years, information and communication technology has witnessed rapid developments and direct impacts of the digital revolution on human lifestyles at the economic, social, and cultural levels. This makes economic development largely dependent on countries' ability to keep pace with and control these transformations, with the goal of exploiting available and renewable potential. Information and communication technology has become an influential force controlling various aspects

of life. This has led to the emergence of a number of modern approaches, systems, and concepts to keep pace with these developments and achieve rapid adaptation and response to these forces, particularly in developing and improving performance and advancing goals toward achieving the best. The term information technology emerges through the combination of the written and spoken word, still and moving images, and wired and wireless communications, whether terrestrial or satellite, followed by the storage of data, analysis of its content, and its availability in the desired form, at the appropriate time, and with the necessary speed. (Abdawi, 2015-2016, p. 77) This century is characterized by tremendous technological developments in various fields, including the development of teaching methods. This has led to the need for new models for a sound educational system. Furthermore, the era in which we live is an era of scientific application, as it is characterized by both science and technology. Therefore, many modern technologies, such as television, cinema and video projectors, and computers, have found their way into scientific application under the influence of increasing pressures of

progress. Specialists in the field of educational technology see the importance of using modern technology in education due to its effective role in the success of the educational process. Scientific and technological development has added many new methods and means that can be utilized to create areas of expertise for learners, thus preparing them with a high degree of competence that qualifies them to meet the challenges of the age. (Habish, 1995, p. 16) Abdullah Yahya pointed out that the school of the future and its concepts call for the renewal and development of education, making it more reliant on modern technology, accompanied by competent teachers who teach through information technology, smart schools, and classrooms. Electronic and other means of developing students' skills, preparing them to adapt to future requirements, and improving their ability to use information in all educational activities, while providing an information-based environment. Despite comprehensive efforts in the field of education, the current educational reality is still far from achieving the goal of comprehensive development in physical education and sports. This confirms the general trend toward advancing sports development with a clear conscience and the efficiency and effectiveness of educational systems. (Baoush and Rami, 2017, p. 50)

2-The Problem and Sub-Questions:

• **The Problem:** In an era of scientific development and technological progress, the use of scientific and technological means has become inevitable, given the rapid developments we are witnessing in our current era. Technology helps accelerate learning outcomes, empower learners, and assist teachers in acquiring contemporary skills to prepare them to meet the challenges of this century. Activating technological means in physical education has become a matter that must be taken into consideration, given its effective role in the success of the educational process. From this perspective, we pose the following question: Does the use of information technology requirements play a role in evaluating the physical education and sports curriculum for the secondary stage, from the teachers' perspective?

• Sub-questions:

The following set of sub-questions arise from this problem:

- Do technological devices and equipment play a role in evaluating the secondary school physical education and sports curriculum?
- Do technological software play a role in evaluating the secondary school physical education and sports curriculum?
- Do technological data play a role in evaluating the secondary school physical education and sports curriculum?

2. Hypotheses:

• General hypothesis: The use of information technology requirements plays a role in evaluating the secondary school physical education and sports curriculum from the teachers' perspective.

• Sub-hypotheses:

- Technological devices and equipment play a role in evaluating the secondary school physical education and sports curriculum.
- Technological software plays a role in evaluating the secondary school physical education and sports curriculum.
- Technological data plays a role in evaluating the secondary school physical education and sports curriculum.

3. Study objectives:

- To identify the reality of the requirements for evaluating the secondary school physical education and sports curriculum through information technology requirements.

- Identifying the reality and attitudes of secondary school physical education and sports teachers toward using information technology requirements to evaluate the physical education and sports curriculum.
- Identifying the role of technological devices and equipment in evaluating the secondary school physical education and sports curriculum.
- Identifying the role of software in evaluating the secondary school physical education and sports curriculum.
- Identifying the role of technological data in evaluating the secondary school physical education and sports curriculum.

4. Defining Terms Technology:

The process of transforming raw materials into finished goods through methods, techniques, tools, equipment, and everything related to this transformation. (Al-Ani and Shawqi, 2008, p. 78)

• **Technology blends:** with the concept of science due to its interaction in applied fields. It is the knowledge of how or how, while science represents the knowledge of why. It provides theories and general laws, and technology transforms them into methods and applications in various activities. (Al-Lami, 2007, pp. 22-23)

Procedurally: It represents an interactive process between human resources, tools, and educational materials with the aim of achieving educational objectives.

Information: A specific set of data related to a specific problem or decision that has been analyzed, processed, and specific conclusions drawn from it.

This serves as a summary of the results obtained as a result of analyzing data relevant to the organization's operations. (Al-Hanawi et al., 2004, p. 278) **Procedurally:** It is data that has been organized, analyzed, and interpreted in a way that makes it valuable for understanding and decision-making.

• **Information Technology**: Eric Brousseau, a specialist in organizational economics, defined information and communication technology as: "A technology that has the ability to intervene in coordination mechanisms by providing the service of processing, transferring, and accumulating the information necessary for coordination between units." (Ben Bouzid, 2011-2012, p. 72)

Procedural Definition: Information technology is a set of technical elements and competencies used to collect, store, analyze, and process information and data using technological methods and techniques with precision.

Physical Education and Sports Class: Lubov defines physical education and sports class as an educational process that develops bodily functions in order to place the individual in a state of sensory adaptation to the situations being experienced. (Mimi, Raqiq, and Ben Youssef, 2023, p. 236)

- Study Methodology: The descriptive approach does not merely involve collecting, classifying, and presenting data and information, but also includes a careful analysis of this data and information, interpreting it to arrive at facts and generalizations that contribute to the advancement of human knowledge (Salhi and Lounas, 2020, p. 287).

The researchers used the descriptive-analytical approach because it is appropriate for the nature of the study.

- Study Sample: A stratified random sample of 35 male and female secondary school teachers in the municipality of Biskra was selected, representing 41% of the research population.

6. Areas of Study

- Spatial scope: The municipality of Biskra.
- Time frame: The study lasted approximately 17 days, from February 25, 2024 to March 10, 2024.

- Human frame: The study was conducted on physical education and sports teachers selected from the municipality of Biskra.
Statistical methods used: Data were transcribed and research results were analyzed using the Statistical Package for the Human Sciences (SPSS).
- Cronbach's alpha coefficient:
To determine the reliability of the scale.
- Arithmetic mean, standard deviation, Pearson's correlation coefficient.
- Simple analysis of variance (ANOVA) test.

7. Presentation and Analysis of Survey Results:

7.1 Personal and Professional Characteristics The following explains the characteristics of the study sample:

Source: Prepared by the researchers based on SPSS V.25 outputs. From the statistical data for the study sample shown in the table above, we note the **following:**

• **Gender:** The sample's vocabulary is largely distributed among males, representing 80% of the total, with 28 items, while females represent 20%, with 7 items.

• Age: The majority of the sample's vocabulary is between 36 and 45 years old, meaning that approximately 42.9% of the study sample is young.

The study sample's vocabulary is distributed at a rate of 31.4% in favor of the 25-35 age group, 17.1% in the 46-50 age group, and 8.6% in the over 50 age group. This reflects the diverse age composition of the study sample.

• Degrees Obtained:

From the previous table, we note the diversity of educational levels and stages. We note that 42.9% of the study sample members hold a master's degree, while those holding a doctorate degree represent 25.7%, those holding other degrees represent 17.1%, and those holding a bachelor's degree represent 14.3%. From the above, we note the diversity of degrees among the study sample members.

• **Years of Experience:** We note that the majority of the sample members, representing approximately 37.1%, have 11 to 20 years of professional experience. Of these, 31.4% have 6 to 10 years of professional experience, and those with more than 20 years of professional experience represent 22.9%. Meanwhile, 8.6% of the study sample members have 1 to 5 years of professional experience. This reflects the diversity of the sample composition, with diverse experiences among the study sample members. Discussion and Interpretation of Study Results: Discussion of the Results of the First Hypothesis:

- The text of the first hypothesis states that technological devices and equipment play a role in evaluating the physical education and sports curriculum for the secondary stage. In order to prove the hypothesis, we have seen from Tables (4, 5, 6, 7) the technological devices and equipment present in the physical education and sports curriculum for the secondary stage. We note that their presence is low in the physical education and sports curriculum for the secondary stage.

This result we have reached is consistent with the findings of previous researchers: Atallah Al-Hasban (2007) under the title "The Extent of Internal Auditors' Adaptation to Information Technology Requirements," Abdelkader Zitouni's (2008) study under the title "Evaluating the Effectiveness of the Physical Education and Sports Curriculum for Secondary School Students," and Bouchiba Mustafa's (2016/2017) doctoral dissertation under the title "Evaluating the Objectives of the Physical Education and Sports Curriculum." They agreed on the necessity of using information technology to support and develop the physical education and sports curriculum, working to develop teachers' capabilities in the field of information technology, and employing information technology requirements in the teaching and learning processes. Therefore, it has become imperative for those responsible for designing the physical

education and sports curriculum for the secondary level to expedite the updating of the curriculum, adopt information technology requirements, and provide them through the use of technological devices and equipment, in order to keep pace with the demands of the technological age. Therefore, the hypothesis that technological devices and equipment play a role in evaluating the physical education and sports curriculum for the secondary level is not valid. Discussion of the Results: The Second Hypothesis: - Text of the Second Hypothesis Technological software has a role in evaluating the physical education and sports curriculum for the secondary stage. In order to prove the hypothesis, it has become clear to us through Table (4, 5, 6, 8) that represents the technological software present in the physical education and sports curriculum for the secondary stage, where we note that it has a low presence in the physical education and sports curriculum for the secondary stage.

This result we have reached is consistent with the findings of previous researchers, including Atallah Al-Hasban (2007) under the title "The Extent of Internal Auditors' Adaptation to Information Technology Requirements," Abdelkader Zitouni's (2008) study under the title "Evaluating the Effectiveness of the Physical Education and Sports Curriculum for Secondary School Students," and Bouchiba Mustafa's (2016/2017) doctoral dissertation under the title "Evaluating the Objectives of the Physical Education and Sports Curriculum." They agreed on the necessity of using information technology to support and develop the physical education and sports curriculum, working to develop teachers' IT capabilities, and employing IT requirements in the teaching and learning processes. Therefore, it has become imperative for those responsible for designing the physical education and sports curriculum for the secondary level to expedite the updating of the curriculum, adopt IT requirements within the curriculum, and provide them through the use of technological software, in order to keep pace with the demands of the technological age. Therefore, the hypothesis that technological software plays a role in evaluating the physical education and sports curriculum for the secondary level is not valid.

Discussion of the results of the third hypothesis:

- The text of the second hypothesis states that technological data play a role in evaluating the physical education and sports curriculum for the secondary stage. In order to prove the hypothesis, we have seen from Tables (4, 5, 6, 9) that represent the technological data present in the physical education and sports curriculum for the secondary stage. We note that it is rarely present in the physical education and sports curriculum for the secondary stage. This result we have reached is consistent with the findings of previous researchers, including Atallah Al-Hasban (2007) under the title "The Extent of Internal Auditors' Adaptation to Information Technology Requirements," Abdelkader Zitouni's (2008) study under the title "Evaluating the Effectiveness of the Physical Education and Sports Curriculum for Secondary School Students," and Bouchiba Mustafa's (2016/2017) doctoral dissertation under the title "Evaluating the Objectives of the Physical Education and Sports Curriculum." They agreed on the necessity of using information technology to support and develop the physical education and sports curriculum, working to develop teachers' IT capabilities, and employing IT requirements in the teaching and learning processes. Therefore, it has become imperative for those responsible for designing the physical education and sports curriculum for the secondary level to expedite the updating of the curriculum, adopt IT requirements, and provide them through the use of technological data, in order to keep pace with the demands of the technological age. Therefore, the hypothesis that technological data plays a role in evaluating the physical education and sports curriculum for the secondary level is not proven. Conclusion: Through this research, which includes an evaluation of the physical education and sports curriculum, For the secondary stage, utilizing information technology requirements highlights the great importance of developing educational curricula, especially in our current era, in light of the numerous reforms taking place in the educational system. This requires us to embrace

the causes of progress and development to keep pace with the emerging changes in various fields, particularly in the field of education. The development of educational curricula is primarily due to its continuous evaluation, which greatly contributes to the educational process, especially in the field of secondary education. This is where the educator (teacher) finds himself confronted with students in their teenage years, which requires him to establish a strong relationship with them that will help achieve the set goals. He must provide them with an appropriate environment for learning knowledge and good habits through educational tools and teaching methods that match their needs, interests, and contemporary desires. Therefore, it is necessary to evaluate physical education and sports curricula based on technological and other requirements, to facilitate the task of the physical education and sports teacher in performing his educational mission in the best possible manner, on the one hand, and to provide effective learning tools for the individual, on the other hand, to achieve educational goals.

Conclusions Based on the theoretical content of the study and the information obtained from the questionnaire, we reached the following

conclusions:

- Technological devices and equipment play a role in evaluating the physical education and sports curriculum for secondary school students.
- Technological software plays a role in evaluating the physical education and sports curriculum for secondary school students.
- Technological data plays a role in evaluating the physical education and sports curriculum for secondary school students.

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