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Criteria Used in Curriculum Evaluation

Mehmet Okur[1], Etem Yeşilyurt[2]

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[1]Akdeniz University, Institute of Educational Sciences, Department of Educational Sciences, Antalya, Türkiye, memet.okurr@gmail.com, ORCID: https://orcid.org/0000-0003-2643-6526
[2]Atatürk University, Kazım Karabekir Faculty of Education, Department of Educational Sciences, Erzurum, Türkiye, etemyesilyurt@gmail.com, ORCID: https://orcid.org/0000-0002-7340-7536
Corresponding Author: Etem Yeşilyurt, Antalya, Türkiye.

Abstract

Just as educational curricula are expected to possess certain qualities such as suitability for their purpose in theoretical and practical terms, scientific grounding, cost-effectiveness, functionality, and applicability, certain criteria must also be considered from the perspective of curriculum evaluation. The primary aim of curriculum evaluation in education is to obtain feedback regarding the deficiencies or erroneous aspects of a curriculum that is under development or in use, and to make the necessary revisions in the curriculum based on this feedback. For the evaluation of an educational curriculum, the degree to which the curriculum achieves its objectives must be measured, and the measurement results must be compared with various criteria. The criteria used in evaluation, as well as the priority order of these criteria, may vary depending on variables such as the type and purpose of the curriculum and the instructional level at which it is implemented. In this context, the question "What are the criteria used in the evaluation of an educational curriculum?" comes to the forefront. No study has been found in the literature that addresses as a whole the criteria used in curriculum evaluation and the general characteristics of these criteria. Conducted within the framework of a qualitative research approach through a review of the literature and functioning as a compilation study, the present research aims to identify the criteria used in the evaluation of educational curricula and to explain the general characteristics of these criteria. Within the scope of the study, it was determined that the criteria used in the evaluation of educational curricula include curriculum evaluation approaches, curriculum evaluation models, objectives, competencies, standards, accreditation, learning outcomes, examinations, 21st-century skills, literacy, and development/advancement, and the general characteristics of these criteria were explained. The results obtained are expected to guide stakeholders of the education system, particularly those involved in curriculum development and evaluation studies, and to contribute to the related literature.

Keywords: Educational Curriculum, Curriculum Development, Curriculum Evaluation, Evaluation Criteria

Introduction

When a human being comes into the world, they are not significantly different ,at least in terms of existence, from a baby born thousands of years earlier. Therefore, what develops the human being and equips them with the ability to think and behave in ways required by contemporary conditions is culture, which is transmitted across generations. Moreover, in the transmission of culture, the knowledge, skills, and attitudes shaped by the conditions of the present day and those that have preserved their validity for centuries constitute an integrated whole. The culture imparted to the individual in order to meet the needs of both the individual and society and to ensure their future-oriented development is conveyed through education. From this point of view, and as frequently emphasized in the literature, education is defined as "the process of creating lasting behavioral change in the desired direction within the individual." Based on this definition, the primary aim of education is to create desirable behavioral change in

the individual. This definition, which also expresses the general and fundamental purpose of education, is fulfilled through educational curricula. Observable changes in individuals' behaviors that occur in the desired direction and at an acceptable level indicate the success of the implemented curriculum (Yeşilyurt, 2021a). Decisions regarding the success, effectiveness, and sustainability of an educational curriculum are made by evaluating the curriculum with reference to certain criteria. Fitzpatrick, Sanders, and Worthen (2011) emphasize the necessity of criteria in order to conduct an evaluation of a program and reach a decision.

Problem Statement

The general aim of educational curricula is to cultivate qualified individuals in accordance with the needs of the individual, the subject field, and society. Due to the advancement of science and the transformation of material and non-material culture, individuals and society must adapt to such changes and developments. One of the most significant instruments that facilitates this adaptation and meets related expectations is the educational curriculum. As Yüksel and Sağlam (2012) state, educational curricula must maintain their currency and be improved in order to fulfill what is expected of them. In this regard, curriculum development which holds considerable importance is a dynamic process consisting of six elements, as widely acknowledged in the literature and in practice. These fundamental elements are listed as needs, objectives, content, learning experiences, assessment situations, and feedback and revision, and the operational process of these elements is executed in a sequential manner (Demirel, 2017; Ertürk, 2014; Fitzpatrick, Sanders, & Worthen, 2011; Stake, 2004; Tanner & Tanner, 1980; Uşun, 2016).

Curriculum evaluation, which reveals the extent to which educational curricula achieve their objectives and their functionality, and which is also a component of the curriculum development process, is as dynamic and systematic as curriculum development itself. As an important stage and integral part (element) of curriculum development, curriculum evaluation is necessary for the implementation, updating, and redevelopment of the curriculum (Demirel, 2017; Ertürk, 2014; Eviren, 2017; Fitzpatrick, Sanders, & Worthen, 2011). Educational curricula must possess certain qualities in order to be considered successful. In addition to being goal-oriented, scientific, cost-effective, functional, and applicable, an educational curriculum must also be flexible depending on the region and conditions in which it is implemented, and it must align with the general views and expectations of the state and society it serves (Büyükkaragöz, 1997; Hesapçıoğlu, 1994; as cited in Yeşilyurt, 2021a).

For the evaluation of a curriculum, the criteria of the curriculum must first be determined in terms of the aforementioned qualities, and measurement results must be evaluated according to these criteria. Evaluation is the process of making a judgment regarding the value of a product by comparing measurement results with a predetermined criterion that has high validity and reliability (EPDAD, 2016; Polat & Yeşilyurt, 2021a). Indeed, the Education Reform Initiative (ERG, 2005) report highlights three stages related to the curriculum evaluation process. The first stage is "deciding on a criterion or a set of criteria"; the second stage involves "collecting data according to the decided criteria"; and in the final stage, the obtained data are evaluated according to the criteria to reach a decision regarding "the value, quality, usability, effectiveness, and significance of the product."

However, it is observed that various issues exist in the literature concerning the criteria that should be used in the evaluation of educational curricula. The findings of studies conducted by Ataş et al. (2021), Gelen and Alış (2018), Kürüm Yapıcıoğlu, Atik Kara, and Sever (2016), and Yazçayır (2016) reveal the existence of these issues and concretize the problems. Indeed, when the related literature is reviewed, it is seen that educational curricula are generally evaluated based on objectives (Kotluk & Yayla, 2016), a selected evaluation model (Aslan & Çıkar, 2017),

or through comparisons of old and new curricula (Sönmez & Alacapınar, 2015). In addition, there are studies demonstrating that standards (Yeşilyurt, 2010) and accreditation (EPDAD, 2016; Özgeriş & Özer, 2022; YÖKAK, 2020) are also used in curriculum evaluation. Furthermore, when the literature is examined (Demirel, 2017; Ertürk, 2014; Fitzpatrick, Sanders & Worthen, 2011; Ornstein & Hunkins, 2018; Stake, 2004; Tanner & Tanner, 1980; Yeşilyurt & Köroğlu, 2021), it is notable that numerous criteria used in the evaluation of educational curricula are present. Fitzpatrick, Sanders, and Worthen (2011) emphasize the need to establish criteria in order to make a judgment about a program and to conduct an evaluation; similarly, Ataş et al. (2021) state that the development of evaluation criteria in program evaluation research may support program evaluation studies. However, no study has been found in the literature that addresses as a whole the criteria used in the evaluation of educational curricula and explains these criteria. Considering that selecting and using appropriate criteria in program evaluation studies and enhancing the validity and reliability of these studies are essential, the criteria used in the evaluation of educational curricula need to be addressed comprehensively. Presenting the criteria used in program evaluation as a whole, explaining the general characteristics of these criteria, contributing to the resolution of criterion-related problems in program evaluation, serving as a guiding resource for relevant stakeholders, particularly experts in curriculum development and evaluation and contributing to the literature all highlight the significance of this study.

Purpose of the Study

This study was conducted to explain the criteria used in program evaluation and the general characteristics of these criteria. In accordance with the overall aim of the study, answers were sought to the following questions. What are the:

- ✓ Approaches,
- ✓ Models,
- ✓ Objectives,
- ✓ Competencies,
- ✓ Standards,
- ✓ Accreditation,
- ✓ Learning outcomes,
- ✓ Twenty-first century skills,
- ✓ Literacy,
- ✓ National and international examinations,
- ✓ Developmental/advancement criteria

used in program evaluation, and what are the general characteristics of these criteria?

Method

The study was conducted using the document analysis method, which is situated within the qualitative research approach. Document analysis can be defined as the process of questioning, examining, and evaluating printed or electronic materials that constitute research data (Bowen, 2009). The document analysis method, which also includes the processes of general literature review (Özkan, 2019), forms the basis of a compilation study that prioritizes or focuses on the thematic headings addressed within the scope of the research topic (Aydoğdu, Karamustafaoğlu, & Bülbül, 2017), and according to Herdman (2006), enables the summarization of ideas and approaches found in the literature or the development of a synthesis aligned with the purpose of the study in light of these works. Therefore, this study largely carries the characteristics of a "review" study. If a study focuses not on the research problem itself but on the thematic headings

of the research topic and gives priority to addressing these headings, it may be considered a review study (Aydoğdu, Karamustafaoğlu, & Bülbül, 2017). Accordingly, this study generally bears the nature of a review. In determining the purpose and draft structure of the study, the scientific books *Curriculum Development and Evaluation in Education* and *Educational Taxonomies*, edited by Yeşilyurt (2021b & 2022a), were influential. The initial information (content, data) related to the topic was obtained primarily from the scientific books titled *Curriculum Evaluation in Education* and *Curriculum Development and Evaluation in Education*. In addition, articles published in Google Scholar, DergiPark, ResearchGate, and Web of Science databases, as well as theses available in the Council of Higher Education (YÖK) National Thesis Center database, were utilized. During the literature review, keywords such as "curriculum development in education," "curriculum evaluation in education," "education/teaching program and standards," "education/teaching program and accreditation," "education/teaching program and 21st-century skills," "program evaluation models," "program evaluation approaches," and "education/teaching programs and development," among others, were used. Sources related to the topic were compiled and numbered. Giving priority to scientific books, each source was assigned a number from 1 to n. Then, the sub-objectives of the study and the corresponding subheadings were addressed sequentially by examining all sources, and content aligned with the sub-objectives of the study was constructed.

Criterion-Based Curriculum Evaluation in Education

In the literature, numerous definitions related to the concept of program evaluation are found. Doll (1996) defines program evaluation as the process of collecting information about the effectiveness of learning experiences that have been selected and organized within the framework of the principles of gradation, coherence, and continuity to achieve predetermined objectives, and comparing the collected information with specific criteria to make a judgment regarding the effectiveness of the curriculum. In a similar vein, Erden (1998) conceptualizes program evaluation as "the process of collecting data about the effectiveness of an educational curriculum through observations and various measurement tools, comparing the collected data with the criteria that serve as indicators of the program's effectiveness, interpreting the results, and making a decision about the effectiveness of the curriculum." Sever (2021) likewise defines program evaluation as the process of comparing the data collected through various measurement tools with predetermined standards or criteria to reach a conclusion regarding the curriculum's effectiveness in cultivating individuals with the desired qualities. A common characteristic across these definitions is the presence of criteria for curriculum evaluation and the use of such criteria as the basis for evaluation. During the 1940s, when the concepts of "measurement" and "evaluation" were often used synonymously even to the extent that "evaluation" referred merely to determining students' academic achievement Ralph Tyler approached evaluation from a different perspective and established new standards, thereby laying the foundations of criterion-referenced evaluation. Tyler conceptualized evaluation as a comparison between intended (anticipated) outcomes and actual outcomes (Fitzpatrick, Sanders & Worthen, 2011; Ornstein & Hunkins, 2018; Sever, 2021; Stufflebeam, Madaus & Kellaghan, 2002; as cited in Yüksel, 2010).

Program evaluation is a necessity, as the planning, design, and implementation of a curriculum may become ineffective in the absence of evaluation. Program evaluation results enable decisions to be made regarding whether the designed curriculum will be implemented, whether the existing curriculum will be continued, which aspects of the curriculum are functioning or not functioning, what the strengths and weaknesses of the curriculum are, and in which respects or elements the curriculum needs to be revised (Fitzpatrick, Sanders & Worthen, 2011; Ornstein & Hunkins, 2018; Sönmez & Alacapınar, 2015; Uşun, 2016). The criteria that constitute the basis for evaluation and indicate what the evaluation will be grounded upon affect

the validity and reliability of the decisions made as a result of curriculum evaluation. The criteria employed in an evaluation study and used as its foundation are selected based on the curriculum's objectives, content, methods, and effects. The criteria used in the evaluation of an educational curriculum are defined as the standards or characteristics that the curriculum is expected to meet (Sever, 2021). Criteria play an important role in determining the quality, effectiveness, appropriateness, and efficiency of a curriculum. The number and nature of program evaluation criteria in education are determined in accordance with the purpose, scope, and method of the evaluation, as well as the objectives, target audience, content, and instructional processes (teaching–learning processes) of the curriculum (Demirel, 2017; Fitzpatrick, Sanders & Worthen, 2011; Ornstein & Hunkins, 2018; Yeşilyurt & Köroğlu, 2021).

Criteria Used in the Evaluation of Educational Curricula

1. Curriculum Evaluations Approaches

When considering the theoretical foundations and objectives on which curriculum development studies are based, factors such as the philosophy adopted, the individuals and society for whom the curriculum is intended, the subject area in which it is employed, and the approaches and models from which it is developed increase the diversity of educational curricula. This diversity, in turn, leads to a variety of curriculum evaluation approaches. How the evaluation process of a curriculum will operate, and according to which criteria the curriculum will be evaluated within this process, depends on the approach upon which the relevant curriculum was developed, as well as on the fundamental structure and characteristics of the curriculum (Kurt, 2016; Özdemir, 2009). Below, the curriculum evaluation approaches commonly used and frequently referenced in the literature are addressed.

Curriculum Evaluation Approaches According to Ertürk

Ertürk (2014) grouped curriculum evaluation approaches into six categories. A curriculum evaluation study may be conducted based on curriculum design, environment, achievement, learning, level of attainment, or product. Below, the curriculum evaluation approaches categorized by Ertürk (2014) are presented together with the evaluation criteria they employ:

Curriculum Design: Evaluation conducted based on the curriculum plan, with the curriculum design serving as the primary evaluation criterion.

Environment: Evaluation carried out according to the school, classroom, and environmental conditions in which the curriculum is implemented; the evaluation criteria consist of the conditions and characteristics of the environment in which the curriculum is applied.

Achievement: Students' grades are considered, and the evaluation criterion is student achievement.

Levels of Attainment: The extent to which the curriculum objectives have been achieved is determined. The difference between the intended objectives and the attained objectives is taken into account; the evaluation criterion is students' level of attainment of the objectives.

Learning: The permanence of students' learning is considered, and the evaluation criterion is students' permanent learning.

Product: Inputs, processes, and outputs are evaluated, and the primary evaluation criterion is the product that emerges.

According to Demirel (2017), in order to serve the purpose of evaluating the curriculum as a whole, both process-oriented and product-oriented evaluation approaches should be used together when evaluating an educational curriculum. From a similar perspective, Kurt (2016) emphasizes that these approaches should be used in combination, noting that basing an

evaluation solely on one approach as the criterion would not be sufficient to ensure the quality of the evaluation.

Curriculum Evaluation Approaches According to Fitzpatrick, Sanders, and Worthen

In the classification developed by Fitzpatrick, Sanders, and Worthen (2011), curriculum evaluation approaches are addressed under five major categories, as widely accepted in the literature (Demirel, 2017; Demirtaş, 2017; Fitzpatrick, Sanders & Worthen, 2011; Ornstein & Hunkins, 2018; Özdemir, 2009; Kurt, 2021; Yüksel, 2010). According to this classification, the curriculum evaluation approaches and their general characteristics can be explained as follows:

A. Goal-Based Curriculum Evaluation Approach: This type of evaluation aims to measure the extent to which a program achieves its objectives. The fundamental assumption of this approach is that the success of a program can be measured by its alignment with its objectives and the degree to which those objectives are attained.

B. Management-Oriented Curriculum Evaluation Approach: This evaluation type focuses on providing information for administrators' decision-making processes in order to enhance the effectiveness and quality of the program. It is argued that data obtained during the evaluation process can be used more effectively by stakeholders or committees positioned at the management level.

C. Expert-Oriented Curriculum Evaluation Approach: This approach relies on the opinions of individuals who are experts in the subject matter to determine the quality and effectiveness of the program. Within this approach, experts establish evaluation criteria related to the program's objectives, content, methods, and outcomes, and evaluate the program accordingly. Expert-oriented evaluation methods offer a scientific and objective means of measuring program quality and effectiveness, while also providing recommendations and feedback for program improvement**. T**his type of evaluation also reassures stakeholders and users, as the program is perceived to have been examined and approved by professionals. Examples include:

- ✓ *Accreditation:* An evaluation conducted to determine whether educational institutions or programs meet specific standards. During the accreditation process, a board or commission of experts visits the institution or program, prepares reports, and renders a decision regarding accreditation (YÖKAK, 2020).
- ✓ *Expert Opinion:* An evaluation in which experts' views are gathered regarding a specific aspect of the program. Expert opinion is collected through methods such as surveys, interviews, or focus groups to identify the strengths and weaknesses of the program, propose alternative solutions, or plan future actions (Gökmenoğlu, 2014).

D. Consumer-Oriented Curriculum Evaluation Approach: This approach is supported by individuals or organizations responsible for collecting information on educational programs as well as products and services such as workshops, in-service training, and instructional materials. The aim is to measure the needs, expectations, satisfaction, and benefits gained by the program's target audience. Program quality and effectiveness are determined through consumer feedback. Suggestions and demands from consumers are considered for program improvement and development. Additionally, consumer attitudes and behaviors are analyzed for program marketing and dissemination.

E. Participant-Oriented Curriculum Evaluation: The primary purpose of this approach is to inform participants about difficulties encountered or likely to be encountered in program-related activities. This approach uses inductive reasoning and focuses on cause–effect relationships. The criteria underlying the evaluation process include reliability, appropriateness, auditability, and verifiability. Rather than forming judgments about the program, this approach emphasizes

describing and understanding the program and providing information about it..

Fitzpatrick, Sanders, and Worthen (2011) also classified various evaluation approaches into four categories by identifying the primary factor that guides or directs the evaluation (the focus or core criterion of the evaluation approach):

- ✓ *Approaches for assessing program or product quality:* These include expert-oriented and consumer-oriented evaluations. While these approaches differ in terms of who conducts the evaluation and the methods employed, both guide evaluators toward determining and judging the quality of the program or product.
- ✓ *Approaches for assessing program features:* These include goal-based, standards-based, and theory-based evaluations. Evaluators using these approaches employ the program's characteristics, objectives, related standards, or underlying theoretical framework as evaluation criteria. The questions that constitute the focus of the evaluation are determined based on the program itself.
- ✓ *Approaches for supporting program-related decisions:* These include Stufflebeam's Context–Input–Process–Product (CIPP) evaluation, Patton's Utilization-Focused Evaluation, and Wholey's evaluability assessment and performance monitoring. The core evaluation criteria are utility, feasibility, accuracy, and propriety. The focus is on the role of evaluation in providing information that enhances the quality of decisions made by stakeholders or organizations.
- ✓ *Approaches based on stakeholder participation:* These include Stake's Responsive Evaluation, Participatory Evaluation, Developmental Evaluation, Empowerment Evaluation, and democratic-oriented approaches.

Other Curriculum Evaluation Approaches

The different purposes served by curriculum evaluation studies have led to the diversification of curriculum evaluation approaches. According to Kaya (2002), the focal points and the criteria underlying product-oriented, static-featured, process-oriented, and decision-facilitating approaches can be summarized as follows:

- According to the product-oriented approach of Tyler, Hammond, Metfessel, and Michael, the focus of curriculum evaluation and its fundamental criterion is the degree to which the program attains its predetermined behavioral objectives.
- According to the static-featured approach of Stufflebeam and Scriven, the focus of curriculum evaluation and its fundamental criterion is the extent to which the program aligns with standards.
- According to the process-oriented approach of Stake and Parlett–Hamilton, the focus of curriculum evaluation and its fundamental criterion is the implementation process of the program.
- According to the decision-facilitating approach of Patton and House, the focus of curriculum evaluation and its fundamental criterion is the needs and decisions of the program's stakeholders.

Apart from these classifications, the literature includes various other categorizations related to curriculum evaluation approaches (Çilek, 2017; Doğan, 2022; Kurt, 2021; Sever, 2021; Uşun, 2016). Within the scope of this study, the most widely accepted evaluation approaches were taken into consideration.

2. Curriculum Evaluation Models

The primary curriculum evaluation models accepted in the literature and the evaluation

criteria upon which these models are based can be listed as follows (Demirel, 2017; Erden, 1998; Eviren, 2017; Ornstein & Hunkins, 2018; Kurt, 2021; Wood, 2001):

Tyler's Objective-Based Evaluation Model

This model aims to measure the extent to which a program achieves its predetermined objectives. According to this model, a program must answer four fundamental questions: What do we want to achieve in education? How will we teach? How will learning take place? How will we evaluate achievement? The model analyzes the relationship among the program's inputs, processes, and outputs.

Metfessel–Michael Evaluation Model

Similar to the Tyler model, this model offers a more detailed evaluation process. The alignment among the program's objectives, content, learning experiences, and evaluation methods is examined. Based on formative evaluation, this model includes reporting problems encountered during program implementation along with proposed solutions. Consisting of the planning, implementation, and evaluation stages of the program, the model requires the evaluator to provide feedback to support program development and propose improvements.

Provus' Discrepancy Evaluation Model

This model aims to evaluate a program's conformity to standards by comparing it with predetermined program standards. Differences between the program's design, implementation, and outcomes and the relevant standards are identified to address deficiencies and prepare improvement plans. Evaluation consists of verification, comparison, and change stages. The evaluator checks the program's alignment with standards, identifies reasons for discrepancies, and provides recommendations for modifications necessary to meet the standards.

Scriven's Evaluation Model

This model seeks to evaluate the extent to which a program responds to the needs of its beneficiaries. By comparing the program with alternative programs, its strengths and weaknesses are identified. Using Scriven's checklists, standards are determined for various program features, and the extent to which the program meets these standards is examined. Checklists serve as tools for identifying the strengths and weaknesses of the program.

Stake's Responsive Evaluation Model

In this model, the needs, expectations, and opinions of program consumers are prioritized. Continuous communication with program consumers is maintained, and their feedback is incorporated into the evaluation. The model aims to enhance consumer satisfaction and contribute to program improvement, evaluating the extent to which the program meets stakeholders' needs.
Stakeholder participation is ensured, and their questions and expectations guide the evaluation process.

Stake's Congruence–Contingency Model

This model aims to evaluate the program's alignment with predetermined criteria and the likelihood of achieving this alignment. It consists of program description, criterion identification, data collection, and data analysis. The evaluator determines whether the program meets the criteria and identifies the conditions needed to address deficiencies. The model seeks to determine whether the program is implemented in accordance with its objectives and to identify the program's probability of achieving its intended outcomes. By using predetermined standards, it aims to make judgments about the program's inputs, processes, and outputs.

Eisner's Educational Connoisseurship and Criticism Model

This model aims to reveal the educational quality and aesthetic value of a program. It consists of the stages of describing, interpreting, and evaluating the program, taking into account the context in which the program exists. With a critical perspective, the model evaluates the program's strengths and weaknesses using qualitative, interpretive analyses.

Parlett and Hamilton's Illuminative Evaluation Model

This model seeks to understand the functioning and impact of a program by considering its context, inputs, processes, and outcomes. It incorporates the views of various stakeholders within and outside the program. By identifying the program's strengths and weaknesses, the model contributes to program improvement.

3. Objectives

The objective, which represents the point to be reached or attained, refers to the desired behavioral changes intended to be achieved in the individual within the cognitive, affective, and psychomotor learning domains of the curriculum. Ertürk (2014) defines an objective as the behavior or behavioral change that is decided to be acquired by the individual through planned and organized learning experiences. In curriculum evaluation conducted with objectives as the basis, the relationships among the instructional situations facilitated by the teacher, the learning experiences encountered by students, and the behavioral changes that occur in students as a result of these experiences are identified; the degree to which the curriculum achieves its aim is determined; and based on this degree, a judgment is made regarding the effectiveness of the curriculum (Erden, 1998). The structuring dimensions of behavioral objectivesone of the most important elements in curriculum development and evaluation are classified horizontally and vertically. Objectives, which constitute one of the most significant criteria in many evaluation approaches and models, can be addressed as hierarchical and sequential (taxonomic) objectives (Yeşilyurt, 2021a).

Hierarchical Aims and Objectives

Ultimate Aims: These aims indicate the direction in which educational services in a country will be utilized and reflect the political philosophy of the country (Ertürk, 2014). Ultimate aims can be defined as the qualities that the ideal individual sought to be raised in that country should possess, or the attributes that the education system is expected to instill in society in order to cultivate such an ideal individual (Özçelik, 2009). The ultimate aim of the Turkish national education system is expressed as follows: "On the one hand, to increase the welfare and happiness of Turkish citizens and Turkish society; on the other hand, to support and accelerate economic, social, and cultural development in unity and integrity, and ultimately to make the Turkish nation a constructive, creative, and distinguished partner of contemporary civilization" (Basic Law of National Education-METK, 2014).

General Aims: For ultimate aims to be well understood and to strengthen the alignment between practice and aim, the scope of the ultimate aim must be expressed in detail through general aims (Özçelik, 2009). Prepared as a breakdown of the ultimate aim, general aims reflect the educational philosophy of the country (Ertürk, 2014). The three general aims included in the METK concretize the ultimate aims.

Aims of Educational Levels: The specific desirable characteristics included in the general aims are not clearly or explicitly stated in terms of which educational level, age group, or sequence they should be acquired (Özçelik, 2009). In line with the general aims, the METK includes the aims of all educational levels from preschool to higher education.

School Aims: The aims of the school, addressed within the scope of general aims, are

determined by considering the type of individual the school aims to cultivate. They reflect the function of schools that implement different programs at the same educational level, such as general high schools or vocational high schools (Ertürk, 2014). For each type of school; such as technical, vocational, or academicschool aims are determined in a manner consistent with the aims of national education (Varış, 1996).

Class-Level Objectivesx After determining school aims based on educational levels and types of schools, specific objectives must be developed according to the grade levels within the school. For example, which primary school objectives should be achieved in first, second, third, or fourth grade is determined (Özçelik, 2009).

Course Objectives: Each school teaches various disciplines under course titles to realize its general aims. Each course has objectives aligned with the general aims and the aims of the school (Varış, 1996). The specific objectives created according to the different courses taught in the school are defined as course objectives. For example, which primary school aims are to be achieved in Mathematics and which in Turkish are determined through course objectives (Özçelik, 2009).

Unit Objectives: In addition to being written as class-level and course objectives, objectives may also be formulated as unit objectives. In schools, teaching is conducted through units that combine related topics. The unit objectives specify under which units the course objectives are to be attained (Ornstein & Hunkins, 2018).

Topic Objectives: These are the most specific instructional objectives. In the teaching of disciplinary fields in schools, various topics are taught within a field. For each topic, objectives consistent with national and school aims are developed, and these are referred to as topic objectives (Varış, 1996).

Taxonomic (Sequential) Objectives

In line with the aims of the educational levels mentioned above, the content to be delivered in each course and the knowledge, skills, behaviors, attitudes, and competencies intended to be acquired by the student constitute the specific objectives (Yeşilyurt, 2022b). The taxonomic objectives that emerge from the classification and sequencing of specific objectives are expressed in this study as cognitive, affective, and psychomotor objectives, based on the taxonomy developed by Bloom et al. (1956) (Demirel, 2017; Güllü et al., 2011; Ornstein & Hunkins, 2018; Yeşilyurt, 2022b).

Cognitive Objectives: The cognitive behaviors that cognitive objectives must cultivate include recalling, interpreting, and using learned knowledge, as well as making inferences by relating information, in line with the cognitive domain taxonomy consisting of knowledge, comprehension, application, analysis, evaluation, and synthesis. The revised cognitive domain taxonomy by Anderson and Krathwohl (2001; as cited in Dağyar, 2022) includes four knowledge dimensions factual, conceptual, procedural, and metacognitive and six cognitive process dimensions: remembering, understanding, applying, analyzing, evaluating, and creating.

Affective Objectives: The affective behaviors that affective objectives must cultivate include interest, attitude, valuing, aversion, personality, character, and other value judgments. It is more difficult to instill, observe, and measure affective behaviors in the desired direction compared with other domains (Yeşilyurt, 2022b). Elaldı (2022) defines the affective domain as "encompassing the physiological, cognitive, and behavioral processes related to emotion.". The affective domain taxonomy developed by Krathwohl et al. (1964; as cited in Elaldı, 2022) includes five levels: receiving, responding/participating/compliance, valuing/appreciation, organization, and characterization/internalization.

Psychomotor Objectives: The psychomotor behaviors that psychomotor objectives must cultivate include performing tasks requiring mind–muscle coordination and exhibiting behaviors using motor skills (Yeşilyurt, 2022b). Simpson (1966; as cited in Donmuş Kaya, 2022), who developed a classification focusing on competency and skill development within the psychomotor domain, states that the psychomotor domain taxonomy offers advantages for research, teaching, curriculum development, instructional material design, and measurement and evaluation. The taxonomy consists of seven stages: perception, set, guided response, mechanism, complex overt response, adaptation, and origination. Donmuş Kaya (2022) emphasizes that Simpson's classification not only guides instructional design and assessment of learning outcomes but is also functional, for example, in providing a basis for standardizing professional competencies.

Finally, in line with the principle of wholeness emphasized in the literature, it is highlighted that education is a holistic structure encompassing cognitive, affective, and psychomotor behaviors; thus, the mental, physical, social, emotional, and moral development of students are interconnected and must be addressed as a whole (Yeşilyurt, 2022b). In the selection and use of objectives as criteria, the objectives embedded in the curriculum and the standards that must be met for the purposes of evaluation provide guidance. Objectives enable judgments regarding the functionality and appropriateness of the curriculum across different competency areas or the adequacy of its performance in practice, in line with its aims. Hierarchical and taxonomic objectives are used as criteria in curriculum evaluation. Objectives are among the most widely used and prominent criteria in the evaluation of educational curricula.

4. Competencies

The Turkish Qualifications Framework (TQF, 2020) defines the concept of competency as "the official document obtained when an individual's acquisition of learning outcomes is recognized at the end of the process of assessment and validation according to specific criteria by the responsible authority." For diplomas, certificates, and documents to be considered competencies, they must be issued by an official authority based on the evaluation conducted at the end of the program. Considering current requirements, all contemporary and up-to-date competencies are defined through the learning outcomes knowledge, skills, and competence that individuals must acquire in order to attain a given competency (TQF, 2022). National qualifications frameworks are systems in which the competencies of a national education system are defined through learning outcomes and associated in a structured manner. Through such a system, the entire education system can be meaningfully structured, developed, and managed. The competencies within qualifications frameworks are treated as criteria in program evaluation.

Turkish Qualifications Framework

The Turkish Qualifications Framework (TQF) is a learning-outcomes-based qualifications classification system that is nationally and internationally recognized in Turkey. The TQF was established to ensure coherence and permeability among different education levels, programs, and institutions; to document and promote the competencies of learners and employees; to encourage lifelong learning; and to enhance quality assurance. The TQF consists of eight levels aligned with the European Qualifications Framework (EQF). Each level includes descriptive indicators of learning outcomes such as knowledge, skills, and competence (TQF, 2022).

European Qualifications Framework

The European Qualifications Framework (EQF), created to increase the comparability of different education and training systems in EU member states, helps learners, employers, and educational institutions understand and evaluate competencies across different countries. The EQF consists of eight levels, and each level defines the knowledge, skills, and competences

possessed by an individual. By aligning national qualifications frameworks with the EQF, the aim is to increase the quality and transparency of education and training in Europe (Özgül, 2021). The purpose of the EQF is to facilitate learners' transitions into lifelong learning, ensure the quality assurance of educational institutions, and enhance the transparency of education systems (EQF, 2022).

5. Standards

A standard is a criterion that includes the knowledge, principles, and foundations regarding how a task can be performed better and what is required to be done (Fitzpatrick, Sanders & Worthen, 2011). In relation to the topic, Richardson (1994) defines standards as "a model or example to be followed, determined by an authority, a tradition, or a common understanding." Standards specify the qualities that a product or process should possess. Standards constitute a criterion to ensure that a product, service, or process is brought to an adequate level before being presented for the use of an individual, society, or the system. Therefore, when determining standards, individual and societal benefit must be taken into consideration as a priority. Each discipline, product, or process has its own established standards, and the primary purpose of these standards is to provide benefit to the individual and society. The determination of standards occurs as a result of processes such as experimentation, implementation, and scientific research, through which their suitability is tested and decisions regarding their usefulness are made (Ataman & Adıgüzel, 2019). Regarding the topic, Sağlam and Yüksel (2007) state that standards related to program evaluation serve as criteria that guide program evaluators, that are used in conducting a meta-evaluation of a program evaluation study, or that serve as a basis for decision-makers when determining the validity and reliability of the evaluation study. The standards mentioned here are standards related to program evaluation activities and serve to ensure the validity and reliability of the evaluation study.

In Turkey, particularly in the evaluation and accreditation of undergraduate programs in universities, various associations accepted by the Council of Higher Education (YÖK) which, in a sense, also assume an external evaluation function evaluate undergraduate programs by using the standards they have established. For example, the Association for Evaluation and Accreditation of Teacher Education Programs (EPDAD) evaluates undergraduate programs by categorizing its standards into input, process, and product, and dividing them into seven areas which are teaching, personnel, students, collaboration, physical infrastructure, administration, and quality assuranceusing a separate series of standards for each (EPDAD, 2016). Today, standards are considered a criterion in terms of the standards of educational programs, ensuring that individuals served by these programs receive education under equal conditions and acquire necessary field competencies and skills. In terms of program evaluation standards, their role in ensuring valid and reliable decisions in evaluation studies is considerably important.

6. Accreditation

Accreditation is defined as an evaluation and external quality assurance process that measures whether a higher education program meets predetermined academic and field-specific standards established by an accreditation agency (EPDAD, 2016). In Turkey, at the beginning of the 2000s, the necessity of certain reforms emerged within the context of the European Union full membership process, and accordingly, new institutions and organizations were established to carry out monitoring and evaluation studies, particularly in the field of education. For this purpose, institutions and associations such as the Sports Sciences Education Programs Evaluation and Accreditation Board (SPORAK), the Turkish Accreditation Agency (TÜRKAK), the Association for Evaluation and Accreditation of Engineering Programs (MÜDEK), the Association for Evaluation and Accreditation of Agricultural Faculties Programs (ZİDEK), and the Association for Evaluation and Accreditation of Teacher Education Programs (EPDAD) can

be considered the first and significant initiatives in the field of program evaluation.

One of the major developments in ensuring the evaluation of higher education programs and the accreditation of institutions that will conduct evaluation activities in Turkey was the establishment of the Higher Education Quality Council (YÖKAK) within the Council of Higher Education (YÖK), following the publication of the "Higher Education Quality Assurance Regulation" in the Official Gazette No. 29423 on 23 July 2015. There are certain criteria used in the evaluation of higher education programs during accreditation processes (Özgeriş & Özer, 2022). Accreditation of educational programs at the higher education level determines the extent to which the relevant higher education program meets academic and profession-specific standards established by an accreditation agency. Accreditation is treated as a fundamental criterion used in program evaluation, containing within itself the standards and criteria upon which the evaluation is based.

7. Learning Outcomes

Learning outcomes, unlike objectives and in accordance with learner-centered education, refer to the concrete, measurable, and assessable expressions of the skills, behaviors, or attitudes that an individual is expected to acquire in an educational curriculum. The degree to which learning outcomes are attained, used as a criterion in program evaluation, is an indicator in assessing the success of the program (Yeşilyurt, 2021a). Dağyar (2021) states that although the concept of learning outcome serves a common purpose with objectives in the curriculum development process, it is defined as the characteristics that students will have acquired by the end of the educational process. The replacement of the terms objective, aim, and target behavior with the term learning outcome in curricula is related to the fact that, unlike previous teacher-centered concepts, learning outcomes reflect a learner-centered approach. Learning outcomes, usually expressed with an action verb, clearly, explicitly, comprehensibly, and measurably define the knowledge, skills, competencies, and attitude changes expected from students at the end of the learning and teaching process. In many disciplinary sources, the concept of learning outcome is used synonymously with *learning outputs*. In line with the program objectives, the characteristics that the individual is expected to acquire at the end of the learning and teaching process typically expressed as an action phrase in curricula appear in the literature as learning outcomes (Yeşilyurt, 2022b). In curriculum evaluation, learning outcomes are treated as a criterion. It is widely observed that learning outcomes are used as a basis for program evaluation, either by analyzing them according to various criteria selected for evaluating the program (Karademir, Öztürk & Alper, 2014), or by determining the degree to which the outcomes have been achieved (Kotluk & Yayla, 2016). Learning outcomes included in the curriculum may be used as a stand-alone evaluation criterion, or may be evaluated according to other selected criteria, both of which support decision-making regarding the program.

8. Twenty-First Century Skills

One of the main aims of education is to prepare the learner for life and to equip them with the competence to solve the problems they encounter in ways that work to their advantage. From this perspective, educational curricula must enable individuals to acquire certain skills appropriate to the requirements of their environment and era. Due to technological developments and emerging innovations, the 21st century requires students who will be the adults of the future as well as all individuals living today, to develop new cognitive, affective, and psychomotor skills (Kılıç, 2022). Although various views exist in the literature regarding what constitutes 21st-century skills, the general framework defined by P21 (Partnership for 21st Century Learning) groups these skills into: *core subjects-the 3Rs and 21st-century themes; learning and innovation skills; life and career skills; and information, media, and technology skills* (Kylonen, 2012; Trilling & Fadel, 2009; Partnerships for Learning in the 21st Century, 2007, as cited in

Yalçın, 2018).

Yalçın (2018) and Çiftçi, Sağlam, and Yayla (2021) emphasize in their studies that 21st-century skills should be included among the criteria used in evaluating curricula. The Ministry of National Education (MoNE), Board of Education and Discipline, defines 21st-century skills as seven main skill areas such as social and emotional; language and communication; higher-order thinking; self; learning; working; and literacy skills and a total of 46 sub-skills, recommending their use in program evaluation (Board of Education and Discipline-TTKB, 2023). Twenty-first century skills are essential for individuals to succeed in social life, and these skills are cultivated through educational curricula. Therefore, in line with the conditions of the current era, 21st-century skills are extensively addressed in scientific studies conducted in the field of education and are thus used as a criterion in curriculum evaluation.

9. Literacy

Literacy refers, alongside the act of reading and writing, to the individual's perception and understanding of their life and the objects and events within it, and to the meaning they ascribe to all relationships in their social life (Aşıcı, 2009). The most general definition of literacy is "the ability of individuals to produce printed materials and to read and make sense of produced materials." However, due to changing times and ongoing developments, the definition has come to include the ability to select what is good, useful, and necessary, and to evaluate existing information according to specific criteria (Koltay, 2011; Özdemir, 2019). Today, the concept of literacy has been integrated with many terms like information, media, communication, digital, scientific, environmental, financial, health, critical, linguistic, cultural, civic, visual, and electronic literacy and has taken its place in the literature (Erdamar, 2020; Karagülle, Varkı & Hekimoğlu, 2019). One of these is curriculum literacy. Curriculum literacy refers to the competencies of teachers, educational and school administrators, curriculum development specialists, and other relevant educational stakeholders to possess the knowledge, comprehension, application, analysis, synthesis, and evaluation skills related to the sub-dimensions or components of curriculum development and evaluation particularly needs, objectives, content, instructional processes, assessment situations, and feedback and revision (Yeşilyurt, 2021a).

Through programs designed to teach information-access skills and evaluate media use, students acquire the competencies required by the information age and can use media consciously. Acquiring different literacy domains is a necessity for individuals' adaptation to the requirements of the era. The definitions and scopes of literacy fields are used as criteria for providing information on how to better design programs and what adjustments are needed to achieve desired outcomes. Moreover, findings obtained from program evaluation studies also contribute to determining literacy domains. From the perspective of program functionality and usefulness, employing the concept of literacy as a criterion in curriculum evaluation is highly important.

10. Examinations

One of the criteria used in evaluating educational programs is examinations. Results of examinations administered at local, national, or international levels serve not only as an indicator of student achievement but also as an indicator of the service quality of educational institutions and the success of programs (Karahan, 2018). In other words, national and international examination results may be employed as a decision-making criterion regarding the effectiveness of educational programs.

National Examinations

In Turkey, examinations used as an assessment and evaluation component are administered

by the Ministry of National Education (MoNE) and the Student Selection and Placement Center (ÖSYM). National examinations such as LGS, YKS, YDT, YDS, and ALES, which are centrally conducted with the purpose of student selection and placement, can be considered an evaluation of the "outputs" of the programs delivered at the educational level from which students graduate. Although these examinations through which the cognitive achievement levels of participants are mostly assessed do not directly evaluate a specific program, they determine whether the education system achieves its intended purpose and identify students' level of attainment, thereby serving as a basis for placement into the next level of education. Central examinations constitute one of the criteria considered in evaluating educational programs and appear in the literature as such (Yeşilyurt & Köroğlu, 2021).

International Examinations

International examinations (PISA, TIMSS, PIRLS) are assessment and evaluation applications that measure learning in areas such as reading, mathematics, and science through surveys and tests. The results of these examinations rank participating countries in terms of educational performance, quality, and standards, and yield findings regarding the functionality, usefulness, and applicability of their educational programs. In this respect, international examinations are used as a universal criterion in program evaluation studies (Yeşilyurt & Köroğlu, 2021). Indeed, according to Feniger, Livneh, and Yogev (2012; as cited in Güner et al., 2014), international examinations and their results guide the evaluation of countries' educational programs and shape educational policies.

PISA: The Programme for International Student Assessment (PISA) is a project conducted by the OECD, evaluating how 15-year-old students apply their knowledge and skills to real-life situations through cognitive tests in mathematics, science, and reading (MoNE, 2019). In addition to these cognitive tests, data are also collected through student, parent, and school questionnaires (EARGED, 2007, as cited in Karahan, 2018). The purpose of the project is not merely to measure students' cognitive competencies but to assess their ability to use their knowledge and skills in everyday contexts.

TIMSS: The Trends in International Mathematics and Science Study (TIMSS) is an international student achievement assessment designed to measure students' knowledge and skills in mathematics and science, with the overall aim of improving mathematics and science instruction. Defining three cognitive domainsthat are knowing, applying, and reasoning and administered every four years to 4th and 8th-grade students, this examination also reveals differences among the educational systems of participating countries (MoNE, 2022).

PIRLS: The Progress in International Reading Literacy Study (PIRLS) is a reading assessment administered by the IEA to primary school students aged 9–10. Conducted every five years in participating member countries using various text types, PIRLS includes cognitive tests administered to 4th-grade students to determine reading comprehension skills and reading habits, as well as questionnaires designed to assess environmental factors (MoNE, 2021; Yeşilyurt, 2021a).

Examinations administered at national and international levels and their results are used as a criterion in evaluating programs. For example, PISA results serve as a criterion in evaluating countries' reading, mathematics, and science education programs; TIMSS results serve as a criterion in evaluating countries' mathematics and science education programs; and findings from PIRLS are used as a criterion in evaluating the "reading skills acquisition" dimension of the instructional programs implemented in participating countries.

11. Development / Advancement

Development is a criterion used in evaluating educational programs not only in terms of

the extent to which students achieve learning outcomes but also in terms of the program's impact on human, social, and economic development. The relationship between development and education is one of the most significant topics in the social sciences. Development refers to the progress of a society in economic, political, cultural, and social dimensions, whereas education is a process through which individuals acquire knowledge, skills, values, and attitudes (Çelik & Yeşilyurt, 2013). There is a reciprocal interaction between development and education. Education is both a means and a result of development. Education contributes to economic growth by increasing individuals' productivity, creativity, innovativeness, and adaptability, thus functioning as a means of development; it is also a result of development, as rising levels of development increase demand for and access to education (Taş, 2007). The quality and diversity of education also improve in parallel with development. To understand the relationship between development and education, analyses must be conducted at both micro and macro levels. At the micro level, the relationship between individuals' educational attainment and their income, employment opportunities, health status, and quality of life is examined, whereas at the macro level, the relationship between countries' education expenditures, education systems, education policies, and educational indicators and their development indicators is evaluated (Tezel, 2010). Studies conducted on this topic demonstrate a positive relationship between development and education (Günkör, 2017).

The often-cited concept of human capital regarding the relationship between development and education refers not only to an individual who is literate but also to one who can think analytically and use acquired knowledge and skills in both economic and social contexts (Çelik & Yeşilyurt, 2013; Çetin, 2014). From this perspective, the quality of human capital and the education that constitutes human capital is crucial for countries to achieve development. Karahan (2018) stated in his study that the main objective of the PISA examination is "to determine the success of education systems in cultivating the human capital that countries need to achieve economic development." Various calculations have been made regarding the returns on educational investments based on individuals' additional income, and these calculations have shown that educational investments are at least as productive as investments in physical capital (Singer, 1971; as cited in Çetin, 2014; Taş & Yenilmez, 2008). There are three elements (types) of development, and these types are pursued simultaneously in countries' development efforts. According to Tolunay and Akyol (2006), these types are listed as follows:

- **Economic Development:** Since goods and services required by people are produced within an economic structure, individuals' welfare and happiness increase.
- **Social Development:** These are development concerns aimed at improving the conditions of social life and in which the service dimension is primarily emphasized. It encompasses issues such as health, education, infrastructure, urbanization, and environmental problems.
- **Human Development:** This refers to enabling individuals to benefit from their personal and social development potential and to contribute constructively to the positive development of the country. The education of working individuals is highly important in human development. Education should be carried out from early ages toward the development of the modern individual.

Conclusion and Recommendations

Educational programs are among the most significant stakeholders of education as a system, particularly formal education. Whether formal or non-formal, deliberately and systematically changing behavior in the desired direction constitutes the primary function of formal education (Yeşilyurt, 2021a). Formal education fulfills this function through educational

programs that rest on a legal (official) foundation and process, must be followed or adhered to, and serve as a guide, especially for teachers but also for all educational stakeholders. However, a qualified and functional educational program that is developed or implemented may be redeveloped or updated based on evaluation results in light of change and progress.

The aim of instructional evaluation is to determine whether the behavioral changes occurring in students throughout the teaching-learning process supporting instructional activities have reached the intended objectives. Decisions are made by considering the level of attainment of characteristics such as knowledge, skills, and attitudes, and various measurement tools and methods are employed in this process. The functionality of a program developed within the framework of the fundamental elements of an educational curriculum and the extent to which it achieves its intended aims are determined through evaluation studies in which the program is assessed as a whole (Demirel, 2017; Ertürk, 2014; Fitzpatrick et al., 2011; Stake, 2004; Tanner & Tanner, 1980; Uşun, 2016; Yeşilyurt, 2021). According to Turgut and Baykul (2010), evaluation in education is classified as assessment of student achievement within the implemented curriculum, determining the extent to which intended objectives and target behaviors (learning outcomes) are achieved, evaluating the effectiveness of instruction, and placing students into appropriate programs. According to Morrison (1993), evaluation is the process of determining the level of consistency between the program implemented by schools and teachers and the outcomes expected from the program. Fink (1995) defines evaluation as a detailed investigation of each dimension and characteristic of the program. McCain (2005) considers evaluation indispensable for a program, emphasizing the identification of its functioning and problematic aspects, and states that evaluation is a decision-making process for determining the value and improvement of the program.

According to Oral and Yazar (2020), the influence of socioeconomic and political developments, changes and advancements in professional and work life, and taking into account the needs, interests, and expectations of individuals and society are among the factors that make curriculum development and evaluation compulsory. The evaluation of educational programs requires the use of certain criteria. However, the literature reveals various issues and challenges concerning program evaluation criteria. The study conducted by Ataş et al. (2021) shows that within the theme of program evaluation, very few studies exist: one related to "model development" and four related to "standard-setting/criteria development." Another study by Yüksel (2010) draws attention to various issues related to the standards of program evaluation activities and the identification of program standards and the evaluation of programs in accordance with these standards. Similarly, the study conducted by Kürüm Yapıcıoğlu, Atik Kara, and Sever (2016) indicates that program evaluation criteria are not sufficiently addressed.

As a result of the present study, it was determined that the criteria of "evaluation approaches, evaluation models, objectives, competencies, standards, accreditation, learning outcomes, examinations, 21st-century skills, literacy, and development/advancement" are theoretically grounded and, for many, practically applicable, and can be used in evaluating educational programs. Based on the characteristics of the fundamental elements of an instructional program (needs, learning outcomes, content, instructional processes, assessment situations, feedback–revision), at least one of these criteria must be taken as a basis when evaluating a program, and the program should be evaluated according to the relevant criterion. However, evaluating an instructional program based on a single criterion may lead to limitations in terms of validity and reliability. Therefore, as many program evaluation criteria as possible should be considered when evaluating any instructional program. Moreover, some criteria (e.g., learning outcomes and objectives; standards and accreditation; approaches and models; literacy and development) may have common or similar characteristics in terms of purpose and function. Although all program evaluation criteria identified in this study theoretically qualify to be

considered in program evaluation, implementing all of them in practice may be challenging for various reasons. For this reason, program evaluation criteria should be selected and used by considering both the characteristics of the program to be evaluated and the main characteristics of the criteria. In light of the findings of this study, the following recommendations are presented:

✓ For evaluating the fundamental (classical/traditional) characteristics of educational programs; such as student achievement, instructional methods and materials, and the applicability of the program, priority may be given to evaluation approaches, evaluation models, objectives, and competencies. For evaluating contemporary characteristics of educational programs; such as societal impacts, sustainability, and innovativeness, priority may be given to standards, accreditation, learning outcomes, examinations, 21st-century skills, literacy, and development/advancement criteria.

✓ Within the framework of mixed research and evaluation approaches, multiple criteria may be used simultaneously in the evaluation of educational programs.

✓ Criteria may be defined in accordance with determined aims, and these criteria may be based on the characteristics, scope, context, objectives, content, process, learning outcomes, and performance indicators of the program.

✓ In program evaluation studies, attention should be paid to ensuring that the purpose of the evaluation and the selected criteria are compatible, valid, and reliable.

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