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# CONTINUOUS DEVELOPMENT OF SCHOOL CURRICULUM: CONCEPT, MODELS, EXPERIENCES

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The development of school curriculum is a complex problem that involves different perspectives of approach: psychological, pedagogical, didactic, managerial, etc. This article attempts to define and characterize the notion of "curricular development" from a modern and postmodern perspective. The development of school curriculum is presented in two senses: the conception of new school curriculum/discipline and the optimization, modernization, and updating of the school curriculum in function. At the same time, a model of school curriculum development focused on five steps is proposed: curriculum research/conceptualization; curriculum design; evaluation of the curriculum project; curriculum validation; curriculum implementation/institutionalization. The substantiation of a curricular development model also involves an analysis of the problem in different countries, as sources for identifying theoretical and praxiological benchmarks for carrying out this process.

**Keywords:** school curriculum, curricular development, curricular optimization, curricular updating, curricular modernization, curricular research, curricular design, optimal curriculum.

# DEZVOLTAREA CONTINUĂ A PROGRAMEI ȘCOLARE: CONCEPT, MODELE, EXPERIENȚE

Dezvoltarea curriculumului școlar este o problemă complexă care implică diferite perspective de abordare: psihologică, pedagogică, didactică, managerială etc. În articolul dat se încearcă definirea și caracterizarea noțiunii de "dezvoltare curriculară" dintr-o perspectivă modernă și postmodernă. Dezvoltarea curriculumului școlar se prezintă în două sensuri: conceperea de noi programe/discipline școlare și optimizarea, modernizarea și actualizarea curriculumului școlar în funcțiune. Totodată, se propune un model de dezvoltare a curriculumului școlar axat pe cinci etape: cercetarea/conceptualizarea curriculară; proiectarea curriculară; evaluarea proiectului curricular; validarea curriculară; implementarea/instituționalizarea curriculară. Fundamentarea unui model de dezvoltare curriculară presupune și o analiză a problemei din diferite țări, ca surse de identificare a unor repere teoretice și praxiologice de realizare a acestui proces.

Cuvinte-cheie: curriculum școlar, dezvoltare curriculară, optimizare curriculară, reactualizare curriculară, modernizare curriculară, cercetare curriculară, proiectare curriculară, curriculum optim.

#### Introduction

In recent decades, the spectacular changes in society have become subjects of debate, analysis and predictions. Against the backdrop of globalization, a veritable "explosion" of technologies, information, values, alternatives, etc. is identified. In fact, this state of affairs is characterized as a postmodern one.

Postmodern education focuses on the interconnection of psychocentric and sociocentric paradigms, which led to the emergence of a new paradigm – the curriculum – having as a priority the purposes of education designed according to the psychological, pedagogical, but also societal requirements towards education.

Transformations at the level of educational curriculum aim at redimensioning the informative and formative functions of education, developing "prospective" curricular products, valorizing the interdisciplinarity/transdisciplinarity; expanding optional subjects, unifying information and communication technologies, training a new generation of teaching staff, promoting partnership relations between educational agents, stimulating active, interactive learning, self-learning [2, p. 5].

In this context, the development of school curriculum appears as a priority problem, the solution of which requires the creation/substantiation of a systemic vision of this process.

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## **School Curriculum Development: Context and Perspectives of Approach**

The term "optimal" (from Latin *optimus* – the best) can be defined as the "most appropriate model" or as the "most appropriate variant" of activity regarding the achievement of the conditions and objectives provided in the context of specific criteria/indicators.

The optimization criterion/indicator is a parameter based on which the comparative assessment of possible decisions and the results of respective activity is carried out.

The problem of *optimization* in education, including the curriculum, is not new. "Optimization" throughout its history has been treated as a principle, as a method/methodology, as a strategy for obtaining better results.

In recent decades, "optimization" has been treated as an approach/theory focused on educational laws and principles, on the conscious and scientific choice of decisions and activity models in the educational framework.

A well-known approach to optimizing the educational process belongs to I. K. Babanski: "Optimization is not a specific method or procedure, but a theory on the construction of learning process, within which a system of didactic principles, the content of education, the forms and methods of training, the real possibilities of students are treated and based on a complex analysis conscious and scientifically substantiated decisions are made" [4, p. 18].

In this context, I. K. Babanski substantiates:

- 1. the principle of optimizing the educational process, as part of the respective theory, focusing on a set of laws: the independence of objectives, contents from the learning possibilities of students; the interdependence and connection between the tempo and efficiency of learning; the efficiency of learning is determined by the motivation for the educational act; the efficiency of learning is determined by the optimal combination of didactic methods and forms of organizing training;
- 2. the criteria and methods for achieving optimization: the performance criterion achieved by each student in the given context and in the given period in relation to their real level of knowledge; the criterion of achieving the time norms established for teachers and students with reference to achieving learning objectives; the criterion of adequate application of efforts for the efficient implementation of training process.

In fact, the optimization of training provides for the unity of optimization of teaching (teacher activity) and the optimization of learning (student activity), based on the following *methods*: systemic and contextual design of learning activities; permanent modernization of learning content and tasks, identifying the main aspects; establishing rational methods and means of training regarding the achievement of designed objectives; differential and individualized approach to the training process; creating the respective conditions for ensuring effective learning; identifying activities regarding time saving and optimal establishment of the teaching-learning tempo; analyzing the results of training in relation to the criteria for optimizing training.

Therefore, I. K. Babanski proposes a unitary (complex) approach to optimizing the training process, which assumes: the optimization procedure includes all components of the training process; focusing on the entire set of didactic principles; the consistency of achieving objectives, knowledge of students' possibilities and the potential of learning activities, the specificity of learning contents and forms in the process of establishing/identifying teaching methods, diversifying training means, etc.

A modern approach to optimizing the educational curriculum can be found in the work of I. Negreţ-Dobridor *General Theory of Educational Curriculum* [3]. Negreţ-Dobridor tries to develop S. Dewey's ideas by referring to the notions of *"curriculum development*" and *"curriculum improvement*", which, in the author's view, are almost synonymous, but are nevertheless "relatively distinct" phenomena [3, p. 190].

Curriculum development refers, first of all, to the design of an absolutely new curriculum.

The case of the Republic of Moldova: in the 1980s, after gaining independence, the need to change the curricular paradigm arose, respectively, the need to develop new curricula.

Curriculum optimization refers, first of all, to improvement – to doing better what is already going well. In fact, the idea of curriculum optimization rises to the rank of a pedagogical principle (J. A. Comenius, I. K. Babanski).

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It should be noted that the expression "curriculum development" can have other meanings: the emergence of new approaches within the framework of curriculum theory; the emergence of new elements/components in the curriculum structure; the emergence of new curricular products; the emergence of new educational strategies, etc.

As a rule, in educational practice the terms "curriculum optimization", "curriculum modernization", "curriculum development", "curriculum improvement" are used as synonyms.

I. Negreţ-Dobridor does the same thing in his work [3], substantiating the pentaphasic model of modern curriculum optimization: the notions "curriculum development" and "curriculum optimization" are considered as synonyms from the perspective of change management.

Therefore, in his convergent vision on the optimization of the modern curriculum, the author distinguishes two fundamentally independent aspects: the *deontological* aspect, the *technical* aspect.

The *first deontological* aspect refers to the expected and unexpected effects following the implementation of theoretical and applied steps in the optimization of educational curriculum.

The *second technical* aspect involves a specific technology focused on the systemic, praxiological, methodological approach and on educational design norms.

- I. Negret-Dobridor proposes a pentaphasic model of the optimization/development of modern curriculum:
- 1. Curriculum research: diagnosis of the current state, curriculum analysis, forecasting of development trends.
- 2. *Curriculum designing:* reference concepts mandatory component of the curriculum, principles and tools of curriculum design.
  - 3. Evaluation of curriculum project through expertise and critical analysis, as well as experimentally.
  - 4. Validation of the curriculum by official authorities (for example: by the Ministry of Education).
- 5. *Implementation of the curriculum* carried out by specialists within the framework of curriculum/ change management [3].

A more general approach to curriculum development belongs to Sorin Cristea, who analyzes models of reconceptualization (development) of the curriculum through construction, reconstruction and deconstruction. The author correlates these three models with the educational paradigms: premodern, modern and postmodern. In fact, from the perspective of postmodernity, the emphasis is on continuous curricular reconstruction in relation to the changes that permanently take place in society.

If the approach to education through deconstruction generated the emergence of new branches/domains in the sciences of education and, first of all, of the general theory of the curriculum, then the approach to education through reconstruction considers the permanent reconstitution of the whole: education, training and the curricular design of education and training [1, p. 137].

The curriculum paradigm from the perspective of reconstruction considers the optimal realization of the relationships between the psychocentric and sociocentric aspects; educator and educated; objectives-contents-methodology-evaluation; teaching-learning-evaluation.

Therefore:

- 1. The "phenomenon" of optimization in education is approached at the theoretical level (in the view of I. K. Babanski).
- 2. The "phenomenon" of optimization is viewed as a pedagogical principle (I. Negreţ-Dobridor, I. K. Babanski).
- 3. The term "optimization" is not synonymous with the term "development", but in educational practice they are very often used with the same meaning.
- 4. In the view of some authors, "curriculum development" involves the development/design of new curricula, and "optimization" involves the continuous improvement of existing curricula.

#### Conceptualization of Educational Curriculum Optimization/Development

The complex foundation of educational curriculum optimization/development focuses on:

1. General curriculum theory, which has as its specific object of study the curricular design of education and training in an open pedagogical context at the level of education/learning system, education system and process, training process and situations.

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- 2. General education theory, which has as its object of study: education in the broad social sense and education in the narrow pedagogical sense, the functions of education, the general goals of education, the basic structure of education, the sides of education. The general theory of education is viewed in the context of curriculum paradigm.
- 3. General training theory, which has as its object of study the training activity as a subsystem of educational activity. The basic categories of the general theory of education are: curriculum, didactic principles, forms of optimizing education, objectives/purposes, contents, methodology/technology/strategy/methods, evaluation; teaching-learning-evaluation, teaching aids, didactic communication.
- 4. General pedagogical research theory with reference to curriculum research. The use of research methodology will provide the interpretative and explanatory basis necessary for understanding the perspectives of curriculum development/optimization, but also for designing new conceptual models of the educational curriculum.
- 5. General personality theory: personality structure, laws of personality formation and development, individual and age-related particularities, internal and external particularities of personality development.

In the context of these theories, at least five directions of curriculum optimization/development are identified:

- 1. Designing an optimal educational curriculum from the point of view of the formation/development of the student's personality.
- 2. Optimal design of educational goals and their reflection in the curriculum framework and more efficient implementation of the educational act in concrete contexts.
  - 3. Optimal organization and implementation of the training process in relation to the designed goals.
- 4. Optimizing training in relation to the individual characteristics of students, their level of development, performance, motives, interests, etc.
- 5. Researching problems in the curriculum framework in order to: (a) redesign the educational curriculum from the perspective of development/optimization; (b) make the training/teaching-learning-evaluation process more efficient.

In our view, the concepts of "optimization" and "development" are part of the set of factors that ensure the quality of the curriculum at the product level and at the process level, namely: research, design, implementation, monitoring, management. Each of these factors/dimensions fulfills specific functions in concrete contexts.

Curriculum design presents a complex activity that has its specific methodology and strategy and which aims to ensure the interdependence and interconnection between: curriculum design - objectives/competences - contents - methodology - evaluation. Curriculum design involves: developing the general concept of the curriculum; designing curricular products: curriculum, subject curricula, textbooks, methodological guides, long-term teaching projects; designing the training process (focused on educational units).

As a rule, design activity is necessary when designing an absolutely new curriculum. In the case of the Republic of Moldova, the design of an absolutely new curriculum is related to the national curriculum reform, started in the 1995s, financed by the World Bank and the Government of the Republic of Moldova. The need for a new curriculum was motivated by the change in the educational paradigm. The need to design a new curriculum also appears in other contexts/conditions: the introduction of new subjects in the curriculum; the integration of two or more school subjects; the emergence of new subjects at the school's decision; the change in the concept of teaching-learning of a subject (change in the curricular paradigm).

In other cases, we can talk about curriculum redesigning.

*Educational curriculum development* is a concept and an activity that involves: developing curriculum theory through new approaches, concepts, etc.; developing the content and structural framework by introducing new curriculum elements/components; creating new curriculum products/documents; developing new educational technologies, etc.

Curriculum development is a continuous process and aims to relate the curriculum to permanent changes and trends in curriculum development at national and international levels. Curriculum development focuses on: the results of respective scientific research; experiences in implementing school curricula; technological transfer, etc.

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Educational curriculum optimization is a principle and an activity that involves "improving", "correcting something that is no longer working well or is no longer good, or making better what is already working well" [3, p. 190-191].

In fact, optimization means doing something better, with minimal effort and tools, in a shorter time, achieving quality, efficiency with optimal means. With reference to the curriculum, the principle of optimization is applied in the following contexts:

- *In the case of designing/redesigning the educational curriculum* with the aim of: obtaining optimal curricular products from the point of view of organizing/implementing the educational process.

In this case, the curriculum can be designed or redesigned in relation to the initial approach, but the connections between the curricular components must be better established, the training objectives must be formulated more adequately, etc. Optimization in this case does not necessarily also imply its development. It is also necessary to mention the opposite phenomenon: curriculum development does not always ensure its optimization. For example, curriculum development from the perspective of focusing on competences does not automatically ensure that this curriculum is also an optimal document from the point of view of quality. However, as a rule, curriculum optimization, in this context, is also synchronized with its development.

- *In the case of training process* by: redefining objectives, reorganizing content, choosing teaching strategies and methods, individualizing and differentiating training; monitoring time, creating conditions, diversifying forms of organizing training, etc.

The efficient implementation of optimization principle at the process level depends on: the quality of textbooks and methodological guides; the proficiency/professionalism of the teaching staff; the level of motivation and development of students; the quality of conditions within which the educational process is carried out, etc.

As an example, we bring a way to choose the optimal lesson. This way involves a series of interconnected actions of the teaching staff: operational and holistic design of a lesson correlated with the design focused on the learning unit, long-term design, curriculum by subjects, but also in relation to the possibilities of the school textbook; concretization of objectives and teaching tasks/activities in relation to the real possibilities of students and classroom conditions; identification of the main thing in organizing the contents; choosing the optimal logic in studying the subject; choosing the optimal structure of lesson; choosing the optimal learning strategies in relation to the objectives of lesson, the potential of class, own pedagogical profeciency, etc.; rational choice of forms of organizing training; rational choice of the tempo and time for carrying out learning activities; creating optimal conditions for learning; achieving effective communication; identifying the correspondence of real learning outcomes with the students' capabilities and the objectives set, as well as with the time allocated for the respective activities.

In educational theory and practice, we can also encounter such notions as "rationalization", "modernization", "improvement" of the curriculum, which should not be confused with the notions of "development", "optimization".

*Rationalization*, as a rule, refers to improving the structure or an element of the structure, to improving the organization of an activity. With reference to the curriculum, this term is less applicable.

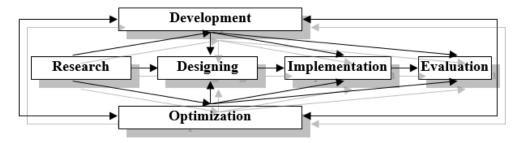
*Modernization* means redesigning the curriculum in accordance with current requirements. So, modernization refers more to improving the educational process by implementing new methods, information technologies, etc. In the Republic of Moldova, this term has been widely used in the framework of the renovation of the third generation curriculum. The current curriculum by subjects is often called the modernized curriculum.

Curriculum *improvement* includes elements of rationalization and modernization and, as a rule, involves improving parts of the whole. In practice, this term does not apply with reference to the curriculum; moreover, its manifestation does not have clear measurement indicators.

Curriculum *updating* refers to its adjustment to current requirements. Curriculum updating is a less successful concept, because from the start it considers the existing curriculum as outdated, which contradicts its real value; it may only be about some less functional elements/aspects.

Therefore, the concept of curriculum optimization is part of a broader approach – the one aimed at ensuring the quality of education. This concept can be presented graphically as follows:

Fig. 1. Development/Optimization in Curricular Context.



Therefore, the optimal curriculum at the product level is determined by: curriculum experts in relation to existing/established criteria; teachers in the implementation process; student results reported to curricular objectives.

The optimal curriculum at the process level is determined by: inspectors/monitors in the field; teachers (through self-evaluation); student results reported to curricular objectives.

Which curriculum at the *product* level can be called optimal?

- The one that ensures the efficient organization of the educational process at the system level and at the process level.
  - The one that is positively appreciated by experts, teachers in relation to quality criteria.
- The one that ensures the formation/development of the student's personality in relation to his/her own potential.

Which curriculum at the *process* level can be called optimal?

- The one that through its structure, logic and content ensures the achievement of curricular objectives.
- The one that through active/interactive teaching strategies ensures the achievement of curricular objectives.
- The one within which the objectives are achieved in the context of the foreseen time.

The optimal curriculum in process terms does not generally mean the best, but the best/the most efficient: (a) for the context and concrete conditions and the possibilities of the teaching staff; (b) at the concrete stage and in accordance with the level of preparation of the students, etc.

From this it follows that the learning results of one student (a group of students) may be optimal, and those of another student (group of students) may not be optimal. In other words, for each student his/her own optimal result must be established.

Therefore, the system of ways to achieve the optimization/development of the curriculum follows/is deduced from the theories, principles and laws of curriculum design and the implementation of educational process.

It should be noted that there is no single optimization/development variant, but a wide variety of variants. The problem lies in choosing the most appropriate variant for the given context. The theoretical foundation for developing the methodology for optimal choice of variants is the systemic approach.

*Optimal conditions* – ,,*optimal" curriculum*. Without creating optimal conditions, it is impossible to design and develop the educational curriculum.

The optimal design/redesign of the written curriculum (of curriculum products) requires compliance with the following conditions:

- 1. The existence of clear curriculum policies.
- 2. The existence of structures for implementing curriculum management at the national and local levels.
- 3. The existence of groups of curriculum designers and their continuous training.
- 4. The motivating curriculum designers through various forms.
- 5. The existence/substantiation of a clear methodology and strategy for the designing/redesigning, optimization and development of the educational curriculum.

The realization of principle of curriculum optimization at the process level focuses on compliance with the following conditions:

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- 1. Material conditions and didactic insurance: the existence of offices, laboratories, technical means, teaching materials, etc.
  - 2. Conditions for ensuring the health of students: compliance with hygiene standards, medical insurance, etc.
- 3. Conditions for ensuring the moral-psychological and aesthetic climate: effective communication, teachers' tact, acceptance of different opinions, stimulation and motivation of students, promotion of values and aesthetic orientations, etc.

A special condition concerns the professionalism, profeciency and attitude of teachers towards the education of students [2, p.77-85].

### **International Experiences in Developing School Curricula**

In all the countries consulted, the following are taken into account in confirming curriculum development: fundamental principles/theoretical landmarks; curriculum components; teaching strategies; the role of teacher; context and adaptability; outcome and impact.

#### **Fundamental Principles as Development Object**

In *Finland*, the emphasis is on integrated learning. The Finnish curriculum focuses on the development of essential competences, which are defined as the ability to apply knowledge and skills in diverse and real-world contexts. Content units are often integrated into modules, which combine several disciplines, so that students can establish connections between different areas of knowledge and apply knowledge in projected situations.

In *Estonia*, curriculum development places significant emphasis on digitalization and personalized learning in response to the individual needs of students. The national curriculum includes the use of information and communication technologies as an integral part of the educational process, preparing students for a constantly changing digital world. Personalized learning focuses on building the curriculum framework and adapting the educational process to meet the individual needs and interests of each student.

In *Denmark*, curriculum development is characterized by a holistic and interdisciplinary approach, which aims to provide students with a more holistic and connected education. The Danish curriculum promotes the integration of different disciplines and subjects to create a cohesive educational experience. Instead of studying subjects in isolation, students work on projects that combine concepts and skills from multiple fields, facilitating a deeper and more applicable understanding of knowledge. Interdisciplinary learning encourages students to apply the knowledge and skills acquired in one discipline to solve problems and explore topics in a broader context. This develops critical thinking and the ability to make connections between concepts from different fields.

In *the Netherlands*, school curriculum development is characterized by an emphasis on flexibility and personalization, with the aim of adapting learning to the individual needs and interests of students. This model reflects the country's commitment to providing an adaptable and student-centered education. Here is a detailed description of the approaches used:

- The Dutch curriculum is designed to be flexible, giving schools and teachers the autonomy to adapt lessons and educational activities to the needs and interests of students. This flexibility allows for the integration of relevant and current themes and topics that may vary depending on the local context and student preferences.
- Personalizing learning focuses on adapting the educational experience to suit the learning styles, pace, and individual interests of students. This involves adjusting teaching materials, teaching methodologies, and assessment strategies to support the progress and success of each student.
- In *Japan*, school curriculum development includes an emphasis on interdisciplinary collaboration, reflecting an integrated approach that aims to prepare students to solve complex problems and make connections between different fields of knowledge. This approach promotes deeper and more relevant learning that can better respond to the challenges of an ever-changing society. Here is a detailed description of the approaches and practices used in Japan to promote interdisciplinary collaboration:

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- Japan promotes the integration of disciplines to provide students with a holistic understanding of the subjects they study. The interdisciplinary approach encourages students to make connections between different fields of knowledge and to apply concepts in a variety of contexts.
- Interdisciplinary collaboration is often based on problem-based approaches, in which students work to solve complex problems that involve multiple disciplines. This helps develop problem-solving and critical thinking skills.
- In *Denmark*, project-based learning and problem-solving are an essential aspect of school curriculum development. This educational model promotes active and engaging learning that encourages students to apply knowledge in a practical and relevant way. Here is a detailed explanation of how Denmark implements these approaches in the educational framework:
- Project-Based Learning (PBL) is an educational model in which students work on complex and interdisciplinary projects that involve exploring real and relevant problems. This model allows students to develop creative solutions and apply knowledge from different fields to address specific challenges.
- The educational approach in Denmark focuses on problem-solving, in which students are encouraged to identify, analyze and solve problems in a critical and innovative way. This involves developing critical thinking skills, collaboration and creativity.

#### **Curricular Components: Development Guidelines**

Table 1. Curricular Competences in Development.

	Table 1. Curricular Competences in Development.				
No. Crt.	Country	Characteristics and Guidelines			
1.	Finland	The curriculum allows flexibility in lesson planning and implementation, giving teachers the autonomy to tailor learning to students' needs and interests.  The curriculum defines learning objectives and key competences to be developed, such as critical thinking, collaboration, problem-solving, and communication skills. Teaching methods focus on active learning, involving students in hands-on activities and projects that promote critical thinking and problem-solving.  Assessment focuses on continuous feedback and compeences development, not just summative grading. Formative assessment is used to guide the learning process and help students improve their skills.			
2.	Estonia	The Estonian curriculum is designed to incorporate essential digital competences, such as programming, advanced software use, and cybersecurity. This ensures that students not only use technology, but also understand the principles behind it.  There is a wide range of digital educational resources available, including online learning platforms, educational applications and digital libraries. These resources are used to support both teaching and independent learning.  Teaching methods are often technology-based, including the use of online learning platforms, educational applications and collaborative digital tools. These methods facilitate more interactive and dynamic learning.  Assessment is often adaptive, using technologies that allow for personalized testing and feedback. This helps to identify strengths and areas for improvement, thus adapting to the individual progress and needs of students.			
3.	Denmark	The Danish curriculum often focuses on themes and projects that include multiple disciplines. For example, a project on climate change may integrate natural sciences, geography, mathematics and language, allowing students to explore the topic from different perspectives and apply a variety of knowledge.			

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		The curriculum is designed to be flexible, allowing for adaptation to students' needs and interests. Teachers have the freedom to plan and implement lessons that integrate different subjects, depending on the educational context and the specific goals of the students.  Teaching methods in Denmark often include project-based learning, which allows students to approach complex problems and collaborate to develop solutions. This type of learning encourages creative exploration and the application of knowledge in a practical and relevant way.  Assessment is often holistic and based on observation, continuous feedback and evaluation of the learning process, not just on the final results. This allows for a more complete understanding of students' progress and development in the context
4.	Netherlands	of an interdisciplinary approach.  The Dutch curriculum allows for personalization through the inclusion of elective learning options and optional modules, which allow students to choose courses and activities that align with their personal interests and future plans.  The use of technology is a key aspect of personalizing learning. Online learning platforms, digital educational resources, and customized apps are used to adapt materials and activities to the individual progress and needs of students.  Teaching methods include differentiated learning, which involves adapting lessons and activities to respond to students' diverse learning styles and proficiency levels. Teachers use a variety of strategies to ensure that all students have access to quality learning and can progress at their own pace.  Assessment is often continuous and formative, providing regular feedback to students and adjusting to reflect individual progress and needs. Formative assessment allows for early identification of areas that need improvement and provides opportunities to adjust learning strategies.
5.	Japan	The Japanese curriculum includes activities and projects that integrate knowledge from various disciplines. For example, a project on the environment may include science, mathematics, geography, and social studies, allowing students to approach the problem from multiple perspectives.  Interdisciplinary projects and assignments are an essential part of the curriculum. They allow students to explore complex topics and develop creative solutions that require the application of knowledge from different fields.  Project-based learning is a commonly used method that involves working in teams to complete tasks that require the application of knowledge from multiple disciplines. Students are encouraged to collaborate and contribute their individual expertise to address complex problems.  Assessment in the context of interdisciplinary collaboration is often integrated and reflects students' contributions to projects and activities that involve multiple fields. This may include group assessments, self-assessments, and peer assessments, which provide a complete picture of individual and collective skills and contributions.

# Role of Teacher in Developing School Curriculum

Teachers in the countries listed are prepared to effectively apply the provisions and guidelines of the educational curriculum and are open to continuous training, innovation and change.

# **Context and Applicability**

As a rule, school curricula in the respective countries are flexible and can be adapted to local contexts and the specific needs of students and the community.

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Table 2. Outcome and Impact as Factors of Curriculum Development.

No. Crt.	Country	Characteristics and Guidelines
1.	Finland	The competency-based approach helps students develop skills essential for success in their professional and personal lives, such as critical thinking, teamwork and adaptability. In <i>conclusion</i> , Finland's competency-based approach offers an education model that emphasizes the development of practical and relevant skills, promoting integrated and adaptable learning that responds to students' needs in a holistic and personalized way.
2.	Estonia	Estonian students are well-prepared for a digital world thanks to advanced technology and IT skills. This gives them a competitive advantage in their future careers and prepares them for the challenges of a technology-based economy. Personalized learning allows students to progress at their own pace and focus on the areas that interest them most. This contributes to a more satisfying and effective educational experience. In <i>conclusion</i> , Estonia has developed an educational model that leverages technology to support personalized learning and prepare students for an increasingly digital world. This model effectively integrates digital education into the national curriculum and uses advanced technologies to support the development of students' essential competences.
3.	Denmark	The integrated approach helps students understand and apply knowledge in a more cohesive and relevant way, making connections between concepts and real-life situations. Interdisciplinary learning develops important transversal competences, such as collaboration skills, critical thinking, and problem-solving, which are essential for success in a variety of contexts and careers.  In <i>conclusion</i> , Denmark adopts an integrated and interdisciplinary curricular approach that promotes holistic and connected learning, supporting students in developing a deep and applicable understanding of knowledge. This educational model facilitates collaboration across disciplines and encourages exploration of the complexity of the world from multiple perspectives.
4.	Netherlands	Personalizing learning helps students to be more motivated and engaged, as they feel more connected to the educational material and more involved in their learning process. Students benefit from learning that is tailored to their needs and interests, which can lead to improved academic performance and the development of skills essential for future success.  In <i>conclusion</i> , the Dutch educational model promotes flexibility and personalization in the school curriculum, providing students with opportunities to tailor their educational experiences to their individual needs and interests. This approach supports the development of more relevant and engaging learning, contributing to students' academic and personal success.
5.	Japan	Interdisciplinary collaboration helps develop problem-solving skills by exposing students to complex problems that require the application of knowledge from different fields.  Students learn to collaborate and communicate effectively within a team, developing skills essential for professional and personal success.  In <i>conclusion</i> , Japan adopts a curriculum approach that promotes interdisciplinary collaboration, integrating diverse fields of knowledge to provide students with more complex and relevant learning. This educational model supports the development of essential skills for problem solving and collaboration in an interconnected world.

#### **General Conclusions**

#### With reference to the conceptual framework:

- Curriculum optimization/development is part of a broader approach the design and implementation of the educational curriculum, performing certain specific functions.
- Curriculum optimization/development can be viewed as a theory, as a principle and as a way of ensuring the quality of curricular documents, but also of the educational process.
- The notions of "optimization", "development", "modernization", "design/redesign", "conception" are not synonymous; each of them has its own meaning and specific functions.
- Curriculum optimization/development is a determining condition in ensuring the quality of the educational curriculum. At the same time, the efficiency of the optimization/development process is determined, in turn, by adequate conditions.
- Curriculum optimization/development is a continuous process determined by the needs and trends of the evolution of education internationally and nationally.

#### With reference to international experiences:

- Experiences in monitoring and developing school curricula vary significantly between countries, but the most effective practices share a number of essential features. European education systems offer a variety of effective approaches to developing school curricula, each adapted to the specific context of each country. Common factors in these approaches include flexibility, the use of data and technology, community involvement and a focus on competences development the key factor contributing to the success of these education systems. By implementing these good practices, education can become more relevant, adaptable and student-oriented.
- Models of school curriculum development are essential for ensuring the quality and relevance of education. Although they vary significantly between countries, certain common features contribute to the success of education systems.

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