

An Integrated Approach to Curricular Contents

An Integrated Approach to Curricular Contents:
Particular Features for Primary Schools

Edited by

Muşata Bocoş and Vasile Chiş

**CAMBRIDGE
SCHOLARS**

P U B L I S H I N G

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This book first published 2013

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

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ISBN (10): 1-4438-4794-1, ISBN (13): 978-1-4438-4794-0

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CHAPTER ONE

PEDAGOGY OF INTEGRATED ACTIVITIES: THEORETICAL AND PRACTICAL LANDMARKS

I.1. The Integrated Approach and the Unity of Knowledge

The traditional educational system has experienced various instances of criticism beginning with the twentieth century. These refer to the fact that traditional pedagogy has as a main focus the educator and the content of education, thus ignoring the students' and the society's needs.

An overview of the evolution of pedagogy, from the seventeenth century up to the twenty-first century, justifies its dichotomous differentiation into *traditional pedagogy* and *modern pedagogy*, namely old pedagogy and new pedagogy. The specific characteristics pertaining to this dichotomy could be summarised as follows:

- a past pedagogy vs a future pedagogy;
- a pedagogy of memory, of recollection vs the pedagogy of critical thinking and problem solving;
- a pedagogy of conservation structures, maintenance vs a pedagogy of change structures, development, anticipation;
- a second millennium pedagogy vs a third millennium pedagogy;
- a pedagogy of knowledge vs a pedagogy of competences;
- a pedagogy of surface learning vs a pedagogy of in-depth learning;
- a pedagogy of craft apprenticeship vs a pedagogy of cognitive apprenticeship. (Chiş, 2005, 12)

Society has undergone many changes over the last decades. These changes have also generated mutations in the field of education. Education could not have remained passive to the challenges imposed by all areas of human life, including the emergence of new ways of producing knowledge.

The complex character of some integrated processes and issues such as globalisation, migration, interculturalism, sustainable development, information overload, poverty, regional and local conflicts, etc. – calls for

an educational approach that is adapted constantly to the changing society we live in.

The integrated training which consists of a full and harmonious development of autonomous and creative personality – this being the goal of contemporary education – targets the stages of education encompassing all the dimensions of the human being. The monodisciplinary and multidisciplinary education proved to have no impact on today's society. It is no wonder that the integrated perspectives, namely the interdisciplinary perspectives and especially the transdisciplinary ones have gained ground, since they:

- provide epistemological progress, allowing the establishment of connections and interrelations between disciplines in a synthesising and integrating manner;
- facilitate reciprocal exchanges between contents, methods, techniques, and language;
- involve the construction of conceptual and practical broader schemata that are more flexible and transferable, the development of paradigms, and epistemological constructs;
- allow new complex problem solving situations, through integrative and synthesising approaches;
- provide solutions to concrete, real problems that consider phenomena and processes in their totality; they approach problems in a holistic manner making thus possible the premises for the development of logical and systemic thinking;
- provide a unified, synthesized, integrated knowledge about the processes and phenomena investigated in a systemic manner;
- can lead to the creation of new specialized languages;
- provide explanatory structures for broad areas of science;
- can lead to the formation of new, border disciplines, called transdisciplines;
- represent a strategy to boost the capacity of active and responsible involvement in learning approaches and innovative and creative capacities.

It is necessary that students (i.e. those who receive education) be faced with learning experiences that are meant to provide skills, capabilities and strategic competencies in order to better adapt to the rapid and continuous changes in today's society. Moreover, these learning experiences should provide students with comprehensive knowledge compared to the narrow specialisation previously offered. Furthermore, these include learning

skills, problem solving skills, socialisation, communication, and (self-) assessment skills.

The exclusive valorisation of the monodisciplinary paradigm when it comes to organising curricular contents generates a segmentation of instruction into distinct, disjointed compartments. In terms of the correlations taking place at a cognitive level, there is a transfer operation facilitated by very distinguishable structures that lie within the disciplinary "territories", isolated from each other.

However, the surrounding reality has an integrated nature and the real life problems that we must solve every day also have an integrated character. Solving them, whether more or less complex, involves appealing to knowledge and skills that cannot be classified as belonging strictly to a limited field of study.

When coping with everyday challenges, an individual, a group or a society need the ability to achieve rapid and efficient transfers between different disciplinary fields, the ability to collect, synthesise and use systemic and integrated knowledge, and skills acquired through the study of various disciplines.

Therefore, students must be prepared for situations where success given by the ability to achieve performance within disciplinary contexts (academic success) is replaced by the success gained through the ability to make connections and fast transfers leading to effective problem solving situations (personal, professional, social success).

In this sense, contemporary educational systems have turned to ensure the implementation of transdisciplinary knowledge by adopting transdisciplinary organizational models of teaching – learning - assessment, with the following theoretical teaching references.

The fundamental change in terms of knowledge production shifts the focus from disciplinary knowledge to transdisciplinary knowledge.

M. Gibbons and his colleagues (1998) make reference to a new trend in the production of knowledge, namely transdisciplinarity along with the traditional ways of producing knowledge, these being dominated by cognitive, contextual and disciplinary structures.

According to the traditional paradigm, knowledge is a process that takes place in a well-defined space (universities, laboratories, research institutes, etc.) and in clear theoretical frameworks, established broadly by classical formal disciplines and their sub-disciplines.

The new manner of generating knowledge values the knowledge unit and is based on both educational needs as well as on the changes and major issues faced by contemporary society. This context allows the production of a new kind of knowledge: a pragmatic one that is focused on

solving significant problems pertaining to real life: one that is strongly committed to social values and involves making judgments and decisions that are not usually confined within disciplinary frameworks.

The characteristics and the manifestation of the contemporary era generate a more obvious constraint from those situations in which research priorities are no longer based on the strict curricular contents of a discipline, but are determined rather by starting from the external side of the discipline reaching towards the inside, so the main determinant of knowledge is the economic, social, political and cultural environment in which it will be used.

According to L. Ciolan (2008, 38), the integrated nature of knowledge

is not produced by a simple superposition of the professional interests of disciplinary specialists. Integration does not represent a subjective desire or an epistemological fad, but it has an objective foundation derived from the dynamic and complex skills needed to solve a problem in a specific context (figure 1.1).

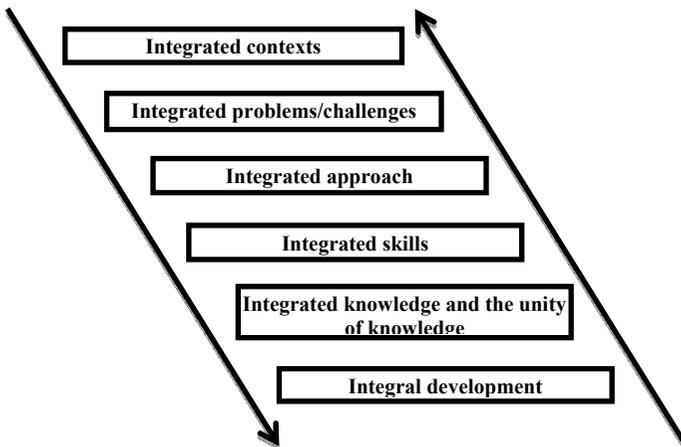


Figure 1.1 From context to knowledge (adapted from Ciolan, 2008, 39)

Two types of pressure are performed on transdisciplinary knowledge: a cognitive (we refer to all types of acquisitions and the stages required for gaining them) and a social one.

Disciplinary cognitive structures based on linear accumulation, hierarchical and structural organization, become inadequate in relation to new contexts of production, promotion and application of knowledge.

These are generated by the challenges imposed by today's society and characterized by fluidity, change, holism, unpredictability and risk.

Social structures exercise more pressures due to the nature of the social contexts in which knowledge is used. Thus, we are witnessing a phenomenon that increases in magnitude. This refers to the avoidance of the disciplines' social fragmentation in favour of their integration.

However, in real life situations that we face on a daily basis and which have an integrated character, the best solution, whether there are very simple or very complex problems, consists in making use of knowledge, competences and skills that overcome the established limitations and the restriction to a certain subject field.

It is necessary to introduce innovative dimensions in knowledge, such as curricular integration, in order to cope with daily demands and challenges in today's society. Naturally, a preliminary stage in the realization of curricular integration is represented by the interrogation stage. There can appear general questions such as "Why should one need an integrated curriculum? Why is curricular integration useful?"

Answering such questions represents actually a set of arguments which support such educational approaches (quoted from Ciolan, 2008):

- *Covering the gap between disciplines.* Because study subjects tend to have a restrictive character there have appeared some "grey areas" on the knowledge map. These have been formed *between* disciplines which led to their isolation and lack of correlations between the contents of various disciplines (*epistemological and pedagogical purpose*). Curriculum integration allows gap coverage between disciplines, namely avoiding their isolation, by harnessing the correlations between content and promoting convergence of disciplinary fields.
- *Ensuring synergy of disciplinary fields,* both in research as well as in the curriculum and educational activities conducted at micro educational (*praxeological and educational purposes*).
- *Building mental, dynamic, flexible and responsive structures* through education in order to support the most appropriate decisions (*psycho-pedagogical purpose*). In other words, these develop the ability to make quick and effective transfers between different disciplinary "layers". They collect, synthesize and use together, integrated and integrative knowledge, skills and competences acquired by studying various subjects. In this way, the innovative and creative capacities are encouraged.
- *Problem solving situations* that can be considered as being the most important driving force of integration due to its practical relevance. The problems we face on a daily basis whether these concern the professional, personal or social matters require from us to assume reasoned judgements, to make decisions and to find solutions even if these are not confined in disciplinary frameworks. Most often, the problems we face have an

integrated character and their resolution requires simultaneous transfers, rapid and significant correlations, synergy and contextualized action (*social and pedagogical purpose*).

Success in school is sustained by the student's ability to “perform” within various structures and disciplinary contexts (if we accept the monodisciplinary paradigm of organising curricular contents). Success in personal, professional and social life is given precisely by the ability to escape disciplinary frameworks, the discipline “box”, the ability to make connections and rapid transfers, leading to efficient solving of the concrete problems we face.

Based on the above considerations referring to integrated knowledge, different ways of organising curriculum contents have been developed over time, in a more linear trend, from monodisciplinary teaching to integrated teaching.

I.2. Integrated Curriculum - Scientific Pedagogical Foundation

I.2.1. The Curriculum – A Central Concept of Contemporary Education

One of the tendencies in the development of didactics over the last decades takes shape within a new grid of approaches and concepts. These bring major changes in contemporary education by defining the modalities to access knowledge. One of these changes deals with curricular integration in the context of a new educational paradigm.

Recent pedagogical literature describes curricular integration as an innovative modality for curriculum design that needs to synthesize and organise that contents in different domains of knowledge to provide the students with the possibility to acquire a coherent and systemic image of the real world.

The curriculum is considered to be one of the key concepts of contemporary pedagogy (Bîrzea, 1993). Its primary meaning in Latin being race, run, chariot (Cassell, “Latin-English Dictionary” in www.archive.org/stream/cassellslatindic00marc/cassellslatindic00marc_djvu.txt).

Since its advent in the educational context, the concept of curriculum has remained one of the most controversial ones in the field of educational theory, is being operationalised in most diverse ways in educational practice (Bocoş and Jucan, 2008). As a consequence, the curriculum has

been accepted, rejected, understood and used in many different ways, sometimes inadequately, generating even a fashion, etc.

Two tendencies have been identified as regards the definition and use of the concept *educational curriculum*: the restrictive tendency (the traditional stage of curriculum) and the extensive tendency (the modern and postmodern stage of curriculum) (Negreț-Dobridor, 2001, 14).

In the subsequent chapters we will present a synthesis of the stages of evolution in the concept of curriculum (Crețu, 2000; Cristea, 2000; Bocoș, 2008). These can be defined in the following terms:

In the traditional stage, the meaning of the term curriculum is that of “official course”, organised in an institutional frame that is specialized in education and that tends to keep up with the structural changes at the social level. As a consequence, the term “curriculum” centred on knowledge started to be used.

Subsequently, the concept became subject of contradictory debates in the pedagogical community, its semantics generating confusions and misunderstandings (Ungureanu, 1999a, 14-24).

In the modern stage, the term curriculum gains the meaning of *pedagogical project*, organised through the correlation of objectives, disciplines and the direct and indirect students’ learning experiences that extend beyond educational environment. In this case, the term used is *student centered curriculum*. Some of the main figures who sustain this approach are John Dewey (1902) and Franklin Bobbitt (1918).

The American philosopher and educator, John Dewey, succeeds to establish this term through his study “The child and the curriculum” (1902). According to his approach, the curriculum is centred on the student so that this one

“becomes the sun that is surrounded by pedagogical devices; the student is the centre around which all things are organised” (Dewey, 1977, 123)

In grounding its theoretical frame, Dewey introduces the term students’ “learning experience” that is organised in school by studying the various range of disciplines. It suggests the complexity, the amplitude and the dynamics of the curriculum as an educational reality. The term has been subsequently used intensively in the effort to operationalise the curriculum.

After almost two decades, the American Franklin Bobbitt, through his work “The Curriculum” (1918), gives the concept new meanings and includes in its sphere the students’ entire learning experience, both in formal activities, organised in the educational environment, and in

activities organised outside school, planned and designed in school. The goal is that of accomplishing a global, integrative education. The key term used in his entire work is “*real education for life*”.

In the postmodern stage, the curriculum has the meaning of *pedagogical project organised according to some principles* that highlight the major importance of the established educational objectives. These objectives determine the choice and the combination of some learning experiences – strategies for organising learning - modalities for evaluating results (Tyler 1949). The term used is *curriculum as an instruction (training) model*.

The postmodern stage marks the continuous evolution of the concept of curriculum. There are taken into consideration new educational paradigms that exploit the progresses in educational sciences, psychology and also the positive experience gained in curriculum practice.

From this perspective, the postmodernity of the term can be conventionally highlighted by the following phases:

1. Initial and maturity phase - between 1950-1970 (Tyler, 1949; Bruner, 1966, 1987; D’Hainaut, 1979, 1994).

As regards the term curriculum, two main approaches have been established due to some crystallisation and consolidation processes (Crişan, 1998; Bocoş, 2008):

- *The restricted, traditional approach* – the term curriculum has some points in common with the term “taught content” (reflected in official educational papers at lower and higher levels). It comprises a collection of documents that have the purpose to regulate certain situations and record learning experiences.
- *The large, modern approach* – this concept is integrative in relation to different dimensions of the educational process: educational objectives, training contents, teaching, learning, and evaluation strategies. In this context, the frame of reference is represented by the complex system of decisional, managerial and monitoring processes that precede, accompany and regulate the design, elaboration, implementation, evaluation and reviewing of the learning experiences offered in school.

The existent relations and interrelations between components are capable to highlight the fact that the reconsideration of the term “curriculum” had not been only a result of a simple linguistic change, but also an intention that the meaning of the term would go beyond contents and plans that represent static, quantitative elements which are prone to be transferred to the students in the form of rigid aims.

2. Reconceptualisation phase – since 1970-1980 and until present time (Pinar, 2004; Pinar et al., 1995; Cristea, 2006).

At the end of the twentieth century, the topic of curriculum research was outlined using two reference terms: the subject matter and the study program. Starting with these terms, the different definitions of the concept gravitate around the following elements (quoted from Bocoş and Jucan, 2008, 109):

- learning experience
- educational objectives, contents and its relations
- contents
- the prescriptive and axiological dimension of the term
- the project dimensions
- the project dimension and the necessity to implement it.

There can be identified definitions offered by authors such as J.F., Kerr (1968); R. Doll, (1988); G. Mialaret, (1979); D.F. Walker (1990); L. D'Hainaut, (1981); A. Glathorn, (1987); C.J. Marsh and K. Stafford, (1988); Al. Crişan, (1994) for each element mentioned above.

In the Romanian pedagogical literature, the term had been occasionally used starting with the 80's but, as a precaution, it was mainly avoided. It had been considered to be dangerous to talk about "curriculum" in Romanian education at that time since "the educational plan" was elaborated by the "centre" as a unique, binding and normative document. Still, the term was sometimes translated using terms close to its restrictive meaning, as the term teaching program. The necessary operational and conceptual opening had been produced only after 1990 and especially, after 1997.

At the end of this paragraph we will present a description of the definitions listed in the pedagogy dictionaries. There are going to be presented the evolutions of the concept of "curriculum", in the modern and the postmodern approach, in the way these are listed by Sorin Cristea in "Dictionary of pedagogical terms" (1998, 88).

The author identifies four main tendencies:

- the tendency to extend the concept which "comprises elements that define the educational objectives, including not only contents but also methods, evaluation modalities and life experiences necessary for the students' development" (Drouin, 1993);
- the tendency to concentrate the concept to an "assembly of contents and learning situations applied under a progressive order which are determined at the level of educational objectives" (Dictionnaire

- encyclopédique de l'éducation et de la formation, 1994, 218);
- the tendency to provide other perspective to the concept ranging from “assembly of planned actions” in a determined pedagogical order (defining educational objectives, establishing contents, methods and materials for teaching-learning-evaluation) to the “elaboration of the necessary dispositions for adequate teacher training” (Valerien, 1991, 203);
- the tendency to approach the concept in a managerial manner, as an “assembly of infrastructure, situations and pedagogical interrelations” in the educational system, either through a global or s specific project that allows the attainment of the goals predetermined by the values of the social environment.

In his effort to identify “the stable dimension of the pedagogical curriculum”, Sorin Cristea puts an emphasis on the relation between basic objectives and contents. He highlights the structural relations that ensure the existence of educational events and phenomena.

Sharing the same vision, Professor Dan Potolea suggests tackling the concept of curriculum by creating a correlation of curriculum with the entire education, in terms of design and development. Likewise, no definition of this term would comprise its essence because the curriculum presents non-linear and successive developments. The author considers that this concept

“has a range of significations that place the term in the area of intensively disputed pluri-semantic concepts” (2002, 70).

Professor Miron Ionescu defines the concept using a much larger perspective and outlines an operational frame of the term. According to him,

the curriculum is both theory and practice that articulates in a systemic manner the multiple and complex interdependences between: educational content, operational objectives, teaching strategies in and outside school (in formal and non-formal contexts), strategies for the evaluation of educational activities. The curriculum refers to the educational offer of the school and represents the system of direct and indirect learning experiences offered to the students and experienced by the students in formal, non-formal and even informal contexts. (2007, 131)

It can be concluded that a clear, unanimous definition of the concept has not been offered yet. This is due to the dynamic character of the curriculum domain that presents periodical changes. Nowadays, there is a large number of definitions assigned to the term, namely over one hundred. Still, there is no unanimous, largely accepted definition.

I.2.2. The Curriculum in Conceptual Frameworks and Application

I.2.2.1. The Curriculum between Concept and Applications

We present in figure 2.I the dimensions of thematic integration in educational sciences according to the studies we have conducted in this domain.

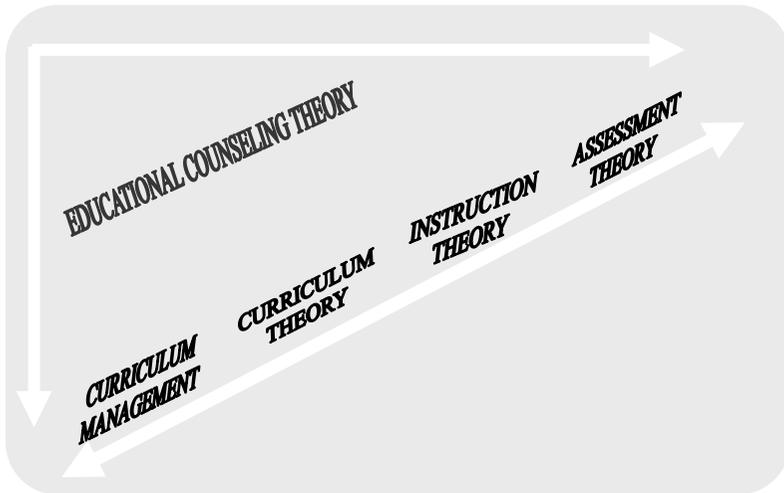


Figure 2.I Integrating study fields within educational sciences

The curriculum theory belongs to the educational sciences domain. This theoretical and applied dimension is very dynamic and, of course, it raises interest nowadays.

According to some references, the term curriculum has been used for a long time, starting from the 16th century (Leiden University, 1582) and the 17th century (Glasgow University, 1633). Still, the first work on this issue had been published much later. Bobbitt John Franklin's work *The Curriculum* (1918) could be considered as an example.

I.2.2.2 The Need for Conceptual Clarifications

The concept of "curriculum" represents a class, a category of varied educational components structured on numerous criteria. In our vision, the curriculum is a large conceptual network. In order to sustain this approach

we mention the systematic interest in curriculum mapping. Many examples on curriculum mapping can be found at www.curriculummapping101.com.

The conceptual map consists in elaborating graphical representations in order to organize knowledge in various structures (Novak and Gowin, 1984). The conceptual structures are organised as multidimensional networks that reveal current meanings and existing relationships.

We are currently faced with the accumulation of a large number of terms that are placed in the “curriculum” category or in its proximity. There exists much literature and different approaches to the curriculum, its design and its applications for the education in the 3rd millennium. But without semantic and operational organisation of curriculum, there is an inevitable risk of too much complicated or futile applications. Also, because of the role played by the curriculum as a main organiser of contemporary educational components, there could appear some dysfunctions in other educational segments due to possible errors and fragmented approaches.

The message of contemporary research on curriculum is direct and simple: the necessity to always connect the curriculum to the *space named school*. We can take into consideration four key factors in order to organize properly the curriculum:

- The schedule, the working time, for a predefined period of time and for a long term.
- The modalities to organise the individual and group activities.
- The allocation of personnel for activities that are performed with whole classes and in groups.
- Using the available educational space.

The curriculum is an *integrative concept* (Fogarty and Stoehr, 1991). We consider that the curricular integration of pedagogical components targets at least two elements:

- Articulating all the components of educational process (objectives, contents, methods and materials).
- Integrating the theme and/or curriculum areas and integrating the disciplines in various models of integrated teaching (transdisciplinary).

Given the vast and varied domain of curriculum research it is necessary to continuously clarify and develop the *conceptual perspectives or the conceptual network* of the term. Specific questions are useful to orient the research of the conceptual network. The curriculum generates inclusive categories.

- How is curriculum defined from an etymological point of view?
- How is curriculum defined in Educational Sciences around the world?
- What are the main characteristics of the curriculum that have the potential to re-launch the educational reform in Romania?

1.2.2.3 Tendencies and Orientations in the Conceptualization of the Curriculum. Definitions and Interpretations

The Oxford English Dictionary (2010) provides the following definitions:

Curriculum: pronounced in English /kʌˈrɪkjʊləm/, is a noun (plural *curricula* / *curriculum*s).

Meaning: The subjects comprising a course of study in a school or college:

Derivatives: curricular, adjective.

Note: The plural of curriculum can be spelled either *curricula* (Latin) or *curriculum*s (English).

Origin: curricule (Latin), the term being used with two meanings: *race, running, action* or *racing chariot, mobile, modality, means of action*.

Arthur K. Ellis, (2004) points out the following characteristics referring to the origin of the term *curriculum*: a *curricule* meant at the beginning of the nineteenth century a vehicle (a carriage) for the driver and passengers. The *curricule* had a *chair* for the driver. The *curricule* was a carriage for a driver and for passengers, being very popular in Europe at the beginning of the nineteenth century; these terms and activities have as origin the Latin word *curriculum*, *having the meaning of race or running*.

Two complementary meanings of the word *curriculum* are incorporated in the definition given by Arthur K. Ellis. The initial meaning, namely *currere*, of action and experience (running) is often quoted by the pedagogical resources but there also appeared a new meaning, that of a *means of action, mobile*, a meaning that is rarely present in the pedagogical literature.

It is useful to relate the curriculum, understood as a pedagogical category, to its etymological meanings since there is a variety of main or secondary meanings that connect in one way or another with the concept, starting from its beginning to the present day.

Contemporary Perspectives

According to John Franklin Bobbitt (1918), known for being the first author who has been specialized in the field of educational curriculum, there are two defining features that characterize the curriculum: a) *it is a field specialized in social engineering* and its development involves a high degree of expertise and b) it comprises *useful learning experiences for students*, preparing them for adulthood.

According to A.V. Kelly (1983, 1999) the definition of the curriculum incorporates other two complementary components: a certain number of courses, *subjects* of which students choose their study fields and an articulated teaching, learning and assessment program, which represents a training program for a specific chosen subject.

Curtis C. McKnight (1979) designed a three-dimensional analysis model of the curriculum: *the intentional dimension*, considered as a program or plan of study, *the applicative dimension*, focused on the idea of action, of implementing the curriculum and *the experiential dimension*, related to the developmental phase and learning sequence. Most contemporary studies stop take into consideration only two of the dimensions described above: a) the prescribed curriculum, proposed curriculum and b) completed curriculum, the curriculum that is put into practice.

a) *The prescribed curriculum, proposed curriculum*. The curriculum is considered to be a program/plan of study (prescriptive documents). The prescriptive dimension of this term places the debate regarding the curriculum on the intentional level, the level of planning something ahead, being taken into consideration the experts' opinion about what should be incorporated in a study program. The prescriptive dimension defines the curriculum as orientation, perspective, and future possible action. The experts indicate a curriculum but there are the teachers the ones who decide what needs to be put into practice.

The prescriptive character of the curriculum is expressed in various definitions such as: "*body of knowledge that needs to be communicated*", "*plan of study meant to satisfy the needs of the community*" "*learning program*" etc.

Thus, the prescribed/proposed curriculum is a completed document, already designed and ready to use. There are numerous documents that incorporate the prescribed curriculum: national curriculum, local or regional curriculum, frameworks, syllabi, course books, guidelines, etc.

b) *The completed curriculum, the curriculum that is put into practice*. The curriculum is perceived as an ensemble of learning experiences achieved both by the students and the teachers.

The curriculum defined as learning experiences shifts the focus from the dimension of a project or indication to the state of process, implementation: how a curriculum project *works* in a classroom and in a school.

The stages of the curriculum as *a* — *plan, program* and as a *b* — *learning experience* are always complementary and not in opposition. Ronald Doll (1996) proposed an integrated definition of the two perspectives, thus: the curriculum represents the formal and informal contents as well as the processes through which the students learn, understand, and acquire skills under the guidance of the school.

Marsh and Willis (2003) elaborate a synthesis of the most frequent definitions given to the curriculum in pedagogical literature. The cited authors offer the following definitions:

- **Curriculum as a group of subjects:** The curriculum is defined through various areas of study such as grammar, reading, logic, rhetoric, mathematics, namely those disciplines that best incorporate essential knowledge.
- **Curriculum as a group of useful topics:** The curriculum is defined as comprising topics that are the most useful for one's life experience in the contemporary society.
- **Curriculum as planned learning:** The curriculum is defined as comprising planned learning sequences for the completion of which school is responsible.
- **Curriculum as learning experience:** The curriculum represents the sum of learning experiences that students receive under the guidance of the school.
- **Curriculum as means of acquiring knowledge and skills:** The curriculum is the sum of learning experiences offered to the students so that they can acquire general skills and knowledge through various learning situations.
- **Curriculum as computer assisted learning:** The curriculum comprises the knowledge the students acquire through the computer activities and the diverse networks such as the internet.
- **Curriculum as investigation and interrogation:** The curriculum is considered to be the interrogation and investigation of the perception on diverse human situations.
- **Curriculum as life experiences:** The curriculum represents all the experiences that the subjects gather in their lifetime.

We consider that a curriculum project with optimal chances for use in education should borrow complementary defining characteristics.

I.2.2.4. Types of Curriculum and their Relevance in Contemporary Education

Starting from the analysis of the definitions, names and classifications that are found in the pedagogical literature on the curriculum (Curriculum pedagogy), we have grouped the terms according to some categories. We present below the conceptual inclusion categories of the curriculum under the generic definition:

The curriculum is the conceptual network with numerous inclusion categories.

1. Levels of stratification

- core curriculum/common courses
- local/regional curriculum (curriculum for regional development, curriculum decided by the school)
- individual curriculum (optional)
- differentiated curriculum
- adapted curriculum
- accelerated curriculum
- enriched curriculum

2. Elaboration - implementation

- prescribed curriculum (projected, formal)
- taught curriculum (completed)
- learned curriculum (accomplished)
- evaluated, tested curriculum

3. Typology - taxonomy according to various criteria

- the explicit/written curriculum
- the societal curriculum (Cortes, 1981)
- the covered/hidden curriculum (Longstreet and Shane, 1993)
- the null curriculum (Eisner, 1994)
- the phantom curriculum
- the concomitant curriculum
- rhetorical curriculum
- the internal curriculum
- the electronic curriculum

4. Documents - additional materials

- national curriculum
- framework programs
- school programs
- course books
- guidelines
- workbooks

5. Curriculum areas (examples)

- Language and Communication
- Mathematics and Sciences
- The Individual and the Society
- Arts
- Physical education and Sport
- Technologies
- Counselling and Orientation

6. School subjects such as: mother tongue, mathematics, physics, history, geography, information and communication technology, physical education, plastic arts, drawing, etc.

7. Curricular cycles such as the ones mentioned in the Framework program concerning the curriculum reform in Romania.

19	Theoretical high school, technical, vocational	XIII	Specialization
18		XII	
17	Vocational school	XI	Thoroughgoing study
16		X	
15	Apprenticeship school	IX	Observation and orientation
14		VIII	
13	Secondary education	VII	Development
12		VI	
11		V	
10	Primary education	IV	Fundamental knowledge
9		III	
8		II	
7		I	
6	Pre-primary education	Pre-primary level	
5			
4			
3			

I.2.2.5 Curriculum Pedagogy: Conceptual Constants and Variable Applications

Contemporary curriculum pedagogy accentuates the flexible character of the study programs/ of learning. In the primary and secondary education the flexibility of the curriculum is ensured by its stratification in three independent yet complementary categories. These three curriculum categories can be constantly found in the majority of the educational systems even though their names vary from one system to another.

• Core curriculum

The core curriculum incorporates the learning experiences necessary to all the students enrolled in a certain study program or within a certain domain of study. Usually, the core curriculum is established by the national education authorities and it concerns particularly the primary and secondary level. Still, there are universities that decide to provide for their students a list of common courses in a certain specialization field.

• Local or regional curriculum

The local curriculum is composed of learning contents and experiences that are specific to the community (social and economic environment) where the school is located. The proposed learning experiences facilitate the students' gain of knowledge about the places, values, traditions, practices in the community. Thus the youths have increased chances of economic and social integration within the community they belong to.

• Individual curriculum

The individual curriculum is a personalized curriculum based on two specific traits that students have as individuals: their educational needs and their educational possibilities. As the students advance towards higher levels of education the importance of the local and individual curriculum can play a decisive role.

The integration of the three curriculum categories in a comprehensive project is a complicated operation for at least two reasons:

- The conceptual map of the curriculum is dense and large. Thus there intervene inclusive or correlated curricular structures that force the trial and validation of diverse combinations.
- Focusing on certain types of curriculum can alter the fundamental principles of curricular construction. The emphasis is laid on principles such as *equal chances, education for all, inclusive education, education for the gifted students, prescribed curriculum*

versus skills-focused curriculum, curriculum focused on acquired knowledge versus curriculum focused on competences etc.

We present in figure 3.I a parallel between the stratification of the curriculum in Romania in relation to its stratification in the educational systems in Europe.

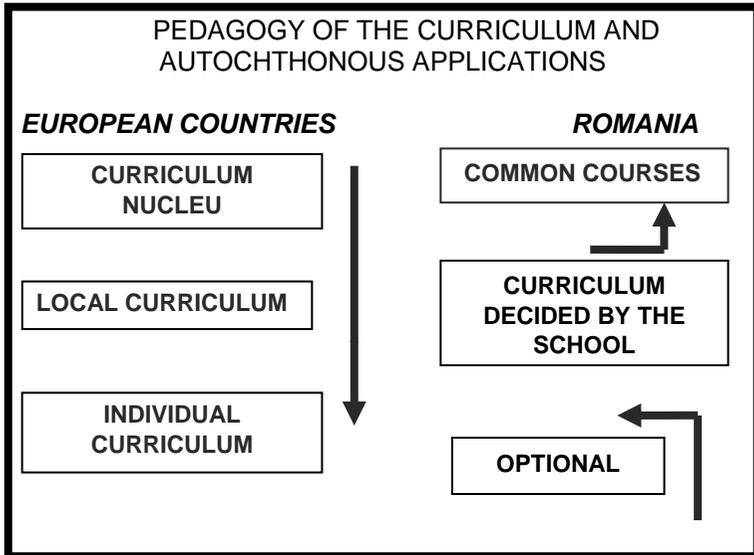


Figure 3.I Parallel between the stratification of the curriculum in Romania and in Europe

The central role of the curriculum in the educational systems in the world is to render more flexible the study programs, to allow the transfer in education from the old paradigm — *the student should adapt to school*, to the modern paradigm — *the school needs to adapt to the student*. Consequently, the curriculum becomes the main operator in the modernization of the educational systems since the curriculum proposes various study itineraries, group and personalized ones, instead of the traditional study programs, common and compulsory, incorporated in the *contents of education*.

Situational analyses performed in schools allow the observation that the curriculum stratification in Romania is mainly a formal activity and the

applications per se frequently remain anchored in the old undertaking of the common and compulsory programs.

The curriculum decided by the school (CDS) is neither the equivalent of *the local or regional curriculum* nor of the School curriculum. The curriculum decided by the school consists mainly of *extensions or the study of the common courses*. In fact, it is more comfortable for the school to assume extensions or studies of the common courses. A so-called new curriculum decided by the school is marked by the numerous red tape administrative and even pedagogical difficulties. Thus the curriculum decided by the school is practically integrated in common courses, thus the two stratifications *the common courses* and *the curriculum decided by the school* come together into the common courses program.

Even though the optional courses are part of the individualised or personalised curriculum in our country they are included in the curriculum decided by the school. Consequently, the school decides the students' and the families' options. They have thus become the famous *compulsory optional courses* in our schools.

The conclusion is a simple one: *the optional* is assimilated into the curriculum decided by the school. In its turn the curriculum decided by the school is assimilated into the common courses plan, the common courses plan becomes the main segment of the "curriculum", even if in fact this is not a curriculum from a pedagogical point of view. We can state that the present education system in Romania does not depend on a curriculum. There is no curriculum, from a pedagogical perspective, despite all the worthy undertakings of curriculum projection and implementation in the Romanian school system.

Curricular concepts stated in the Romanian Education Law no.1/2011

1. **The national curriculum** represents the coherent ensemble of the education frameworks and of the study programs in upper secondary and compulsory education (Chapter IV, art. 64, paragraph (2)).

2. **The education frameworks** consist of the disciplines, fields of study, respectively the compulsory and optional training modules as well as a minimum and maximum number of allotted hours (Chapter IV, art. 65, paragraph (1)).

3. **The common courses program** consists of compulsory disciplines/domains of study/ training modules and the curriculum decided by the school is formed of the optional disciplines/domains of study /training modules (Chapter IV, art. 65, paragraph (2)).