

http://www.jmde.com/

Articles

Curriculum Evaluation in Greece

Vangelis Krikas University of Crete, Greece

ABSTRACT: The role of curriculum in the official educational process is widely recognized by the international scientific community. Beginning in the 19th century, and perhaps even earlier, curriculum research began, not only to be systematized, but to also constitute an autonomous field of study. On the other hand, curriculum evaluation has captured the attention of experts involved in the science of education over the last few years. This article will present the results arising from research with respects to curriculum evaluation in Greece along with a micro-model proposed for the evaluation of the Cross-Thematic Unified Curriculum Framework and the corresponding Individual Subject Curricula that are applied today in compulsory Greek education.

KEYWORDS: curriculum evaluation; Greece; Cross-Thematic Unified Curriculum Framework; Individual Subject

he year 2003 was a landmark year for Greek education (Kassotakis, 2004), since new curricula regarding compulsory education was contrived and published. The philosophy of this particular educational proposal is based on the effort to construct a general framework of principles within which the curriculum of all the taught courses in both primary and junior high school will be in harmony and interaction with one another. In this capacity, the cross-thematic approach of knowledge occupies the central position. According to the people in charge of the Pedagogic Institute of Greece, these new curricula have upgraded the quality of education since they:

- Matched the objectives, the content and the teaching activities to the level of each teaching unit.
- 3. Established the development of projectworks within the framework of all courses.
- 4. Created the "zone of flexibility", which draws a correlation between the connection of school knowledge with students' experiences and the associated problems of modern life.
- Organically connected the assessment and the remaining processes of teaching, as such, proposing various forms and techniques of assessment.
- 6. Improved reading, mathematics and scientific literacy.²

Established a cross-thematic approach in school knowledge.
 Matched the objectives, the content and

¹ The Pedagogic Institute is the oldest researching and advisory institution in questions of education and with its work contributes basically in the mapping out of the educational policy by the Ministry of National Education and Religions of Greece.

² The new curriculum for the obligatory education was completely applied in Greece in the year 2007, when the writing of corresponding school textbooks was

The new curriculum's development seems to open a new chapter for Greek education, the value of which has not been assessed yet. The question that does arise however, is whether or not the process of curriculum evaluation constitutes one of the priorities of Greek, and by extension European, educational policy?

Seeking Curriculum Evaluation in the European Union and Greece

The evaluation process seems to be at the centre of the European educational policy's interest. Since 1992, the European Union (EU) has promoted the evaluation processes of the educational and training programs that it had developed. According to the "Conclusions of the Council of June 1st, 1992 on the Evaluation of Community Programs on issues of Education and Professional Training":

- 1. All the new community programs should be evaluated based on criteria and processes as detailed in each of their respective objectives.
- 2. This evaluation should include a report concerning the situation that prevails before the program's application (initial report), a report based on the program's application during the first two years (intermediary report) in order to determine if any possible adaptations are required, and a report that will be drawn up once the program is completed (final report) (Official Journal the European Union, no. C 151 of 06/16/1992, pp. 3-4).

A decade later, the EU recognizes the role of evaluation in educational quality assurance, a

completed. Further analysis of the structure and content of the new curriculum of Greek obligatory education is found beyond the limits of the present article. For more information, those interested can turn to the web page of the Pedagogic Institute of Greece. (http://www.pischools.gr/programs/depps/index_eng.php).

fact confirmed by the "Constitution of the European Parliament and Council, of February 12th 2001, regarding the European Collaboration for the Evaluation of Quality in the School Education." In addition to educational quality assurance, the EU also showed particular interest in the quality of educational systems of member-states in their totality. The meeting of the European ministers of Education in Bologna (June 19th 1999), the European Council of Lisbon (March 23-24th 2000), the European Council of Stockholm (March 23-24th 2001) and the European Council of Barcelona (March 15-16th 2002) confirmed the necessity for adaptation of the European educational systems based on the new facts of the Society of Knowledge and the contribution of the educational evaluation in this effort.³

Based on the aforementioned information, it becomes evident that program evaluation is found within the intentions of the EU. However, no particular report around the question of curriculum evaluation is reported, a fact that creates a significant gap in the efforts of the European educational policy innovators.

Greece

The Greek educational policy, clearly influenced by the EU lines, over the last few years, has considerably promoted the issues of educational evaluation, even if in this case the curriculum remained on the fringe. Over the last four years however, a series of important developments were noted.

Based on a pilot analysis that we carried out through researching the official Greek educational texts of the last fifteen years (laws, presidential decrees, proposals of the Pedagogic Institute, etc.) we came to a basic conclusion: The Greek state, in the official texts that notify its educational intentions does not promote the question of curriculum evaluation, even though

Journal of MultiDisciplinary Evaluation, Volume 6, Number 12 ISSN 1556-8180 June 2009

³ Detailed information on the activities of EU on issues of education and training is provided at EU http://europa.eu/pol/educ/index_en.htm

it shows interest for resembling subjects, such as the evaluation of teachers' educational work (Krikas, 2007). Exceptions constitute three official texts:

- 1. The proposal of the Pedagogic Institute titled "Unified Framed Curricula: For the Primary and Secondary Education," published in 2000 (2nd publication).
- 2. The proposal of the Pedagogic Institute regarding the Unified Frame of Cross-Thematic Curricula, as it is published in Official Journal of the Hellenic Republic, 1366, issue B, 18-10-2001.
- 3. The draft of the law "Quality assurance in the higher education- System of transport and accumulation of credit units—Annex of diploma" (http://www.alfavita.gr/tritobatmia/trit ob23.htm 28/02/2009).

Due to the present article's limited extent, a thorough analysis of the texts mentioned above is not possible. It is simply reported that in the first text the curriculum evaluation of certain cognitive objects at the primary and secondary education is discussed. In the second text, the new curriculum evaluation in the compulsory education of Greece is mentioned without giving explicit theoretical and methodological indications. The third text addresses the quality assurance in higher education, as the quality investigation of curriculum constitutes one of the four basic criteria for the evaluation of Greek universities.⁴

In summary, curriculum evaluation in the EU and Greece is still in its initial stages, which is evident by the fact that the developed proposals are few, general and theoretical. This fact constitutes the reason for the development of the present study and for the methodology which will be presented more concisely below.

The application of the new curriculum in the Greek compulsory education raises several questions concerning its evaluation. Through pilot research that we conducted with the attendance of the Greek Pedagogic Institute experts, who designed the Cross-Thematic Unified Curriculum Framework (C-T.U.C.F.) and the corresponding Individual Subject Curricula (I.S.C.), it was realized that even though they were concerned about the issue of the latest curriculum evaluation before its application, they did not have an organized theoretical and methodological framework at their disposal in order to develop this process (Krikas, 2007). These findings raised a number of questions with regard to the process of curriculum evaluation in Greece, as it is referred below:

Which course should an evaluator follow in order to evaluate the Greek curriculum? What are the theoretical frameworks and the methodology around the process of curriculum evaluation in Greece? Which evaluation approaches are compatible with the nature and the structure of Greek curriculum? What type of criteria should be used as a curriculum to be effectively evaluated in Greece? What are the general and specific criteria that are to be used for the evaluation of the new curriculum in Greece?

Using these questions as a starting point, a relative research was drawn and developed, with the basic aim being the imprinting of indicative structure and the determination of the criteria that can be applied to the process of the intended curriculum evaluation in Greece.⁵

In order to achieve the aim of this research, a thorough analysis of the relevant international bibliography was conducted and the following techniques around the inquiring data collection were developed:

Method

⁴ The rest three evaluation criteria are the teaching work's quality, the quality of researching work and the quality of other academic services.

⁵ For the "intended curriculum," but also for the other two curriculum dimensions (Applied-Attained) (see Valverde, 2003).

- 1. Interviews: The interviews that were provided were distinguished into two categories and were developed in two phases. The first category concerned interviews with experts in issues of educational evaluation and it was developed at The Evaluation Center at Western Michigan University in the United States. The second category concerned interviews with experts on issues of curriculum planning and development in Greece and it focused on scientists and specialized individuals, who occasionally held or still currently hold key positions in institutions that formulate the educational system and curriculum in Greece (e.g., Pedagogic Institute).
- 2. Focus Groups: With respects to the needs of the particular research, three sessions took place: One of them took place in The Evaluation Center with candidate doctors, in the evaluation's object and the other two took place in the Pedagogic Institute of Greece with

- members of C-T.U.C.F and I.S.C designing teams.
- 3. Document analysis of the C-T.U.C.F. and the I.S.C: The evaluation criteria (general and specific) were used as the categories of analysis, which were formed within the research framework. The aim of the analysis was exclusively focused on the pilot application of the process and the evaluation criteria that were developed, in order for an assessment of their appropriateness and functionalism to occur.

Results

Based on (a) the relevant international literature (Hill, 1986; Nowakowski et. al., 1985; Skager & Dave, 1977; Sanders 2000; Stufflebeam, 1973; Worthen & Sanders, 1987,), (b) the collected research data, and (c) the research of Flouris (2006) for curriculum evaluation, the process of curriculum evaluation in Greece can be described as shown in Figure 1.



http://www.jmde.com/ Articles

Structure of Curriculum Evaluation Process in Greece

Stage 2: Crewing the Curriculum Evaluation Stage 1: Preliminary Process 1. Initial contacts of evaluators and the evaluation agents 2. Expediency of evaluation 3. 1. Choice of the core evaluators General delimitation of the process 4. Study of 2. Locating exterior collaborators and experts 3. General directions basic sources 5. Undertaking of evaluation 4. Terms of reference and responsibilities **Stage 4: Deconstruction of Curriculum Stage 3: Evaluation Layout** 1. Analysis of the educational ecology of 1. Determination of the evaluation aim and objectives curriculum. 2. Identification of "critical" dimensions of 2. Evaluative questions curriculum. 3. Needs assessment 3. Identification of the hidden and null 4. Choice of evaluation approach curriculum. 5. Analysis of the progress of evaluation process **Stage 6: Collection of Evaluative Data Stage 5: Criteria and Standards** 1. Locating and organizing the process of 1. Definition, development and check of approaching the available sources of information appropriateness of evaluation criteria and 2. Data collection standards 3. Determination of the assessment evidence in 2. Application of evaluation criteria and lack standards 8. Management of Results 7. Analysis of Evaluative Data 1. Announcement of the results of evaluation 1. Categorization, analysis and interpretation of (evaluation report) the data 2. Development of proposals to agents 2. Data coding 3. Evaluation support 3. Preparation of the evaluation report announced 9. Curriculum Meta-Evaluation 1. Criticism and reconsideration of the evaluation process 2. Determination and statement of the "value" of evaluation

The diagram above depicts a step by step the process that can be followed for curriculum evaluation in Greece (and potentially anywhere). The black arrows show the typical linear course of process and the white arrows indicate the possibility of repetition or the return of the process to previous stages, provided that this is judged essential by the evaluation team.

During the development of this particular proposal an effort was made for the process to correspond on the one hand, with the theoretical and methodological principles of the educational programs evaluation (AEA, 2004) and on the other hand with the particular educational conditions that prevail in Greek reality.

The stages described in the diagram above are not concerned exclusively with the case of curriculum evaluation in Greece. For example, stages no. 1, 3, 6, 7, 8 and 9—with differentiations concerning the "object" of evaluation—could also be applied to other cases of educational programs' evaluation. Because of the particular article's limited extent, our interest will be focused on the stage 5 that refers specifically to the evaluation criteria of curriculum in Greece.

Evaluation Criteria for the Greek Curriculum

During stage 5 (Criteria and Standards), the evaluation team is faced with its most demanding challenge: to determine the dimensions of curriculum merit, formulating the criteria (Coryn, 2007; Scriven, 1991), and defining the standards⁶ of evaluation. The

⁶ The determination of standards constitutes a particularly complicated process, specifically when these are applied in qualitative dimensions of the curriculum merit. In the case of Greek curriculum evaluation and based on the

Barely Adequate, Poor (Davidson, 2005).

configuration, the control of appropriateness and the application of evaluation criteria constitute a complex process, which is expected to determine, to a great extent, the success or the failure of the process as a whole. In the past, many scientists (DeRoche, 1987; Henderson & Hawthorne, 2000; Nowakowski et. al., 1985; Shepherd & Ragan, 1982; Stufflebeam, 2001) attempted to collect and categorize those are considered basic variables that curriculum evaluation, while not always proceeding with explicit segregation of its dimensions (Intended-Applied-Attained). In the present article the criteria that were formulated for the evaluation of the intended curriculum in Greece are presented. These criteria are distinguished between the general (which can potentially be compatible also with other curricula) and the specific (which concern exclusively the C-T.U.C.F. and I.S.C.).

The process of developing the criteria for the Greek curriculum evaluation is based on the research of Skager and Dave (1977), who in the framework of an inter-country program, in which Sweden, Romania and Japan participated, developed some general evaluation criteria of the intended curriculum. This particular research is considered important for the case of Greece since, during the period the research was conducted, all three countries that participated in the study had a centralized educational system that was similar with that of Greece; having a common curriculum for the whole state (Skager & Dave, 1977).

Based on the research by Flouris (2006) on curriculum evaluation and on the outcomes that resulted from delving into the relevant bibliography, a long list was initially composed with variables that could constitute "the dimensions of merit" for the intended curriculum in Greece. Then, the variables that were not compatible with the nature and the character of the Greek educational system were excluded from this list, and several relevant variables were fused. The result of this effort was the configuration of a list with criteria that appear to be compatible with the intended

in qualitative dimensions of the curriculum merit. In the case of Greek curriculum evaluation and based on the criteria that are presented in the particular article, the adoption of absolute standards is proposed, on the condition that each evaluation criterion will be converted in exploratory points of view—proposals, what can be evaluated on the scale Excellent, Very Good, Good,

curriculum in Greece. The general evaluation criteria of the intended curriculum are broken down into two categories: The first category includes the criteria that refer to the wider context of curriculum planning and development and are classified in the following categories:

- Curriculum Cost
- Curriculum Background
- Curriculum Design and Support

The second category includes the criteria that refer to the curriculum as a text and are classified in the following categories:

- Curriculum Theoretical Framework
- Curriculum Intention
- Curriculum Content
- Teaching Principles and Means
- Educational Activities
- Null Curriculum

Then, the general criteria of evaluation of the Greek curriculum are presented along with some indicative questions that contribute in their investigation.

General Evaluation Criteria of the Intended Curriculum in Greece

Evaluation Criteria Referring to Curriculum Content

1. Curriculum Cost. People in charge of the curriculum design are supposed to take advantage of the available resources (human potential, money, time, material and technical infrastructure) and seek out the best possible combination of quality and economy.

Human Potential. It refers to the capacity of individuals that participated in the curriculum design and to the level of training and their specialization.

- How many people participated in the curriculum design and what were their basic or post-graduate studies?
- What type of training did these people have? What was their working experience?
- Did curriculum design and development experts participate in the process?

Financial Cost. It refers to the total pecuniary sum that was spent on the curriculum design.

- How much money was spent designing the curriculum?
- In which way was this money distributed?
- Who was best rewarded and why?
- Which activities were most supported, and which were least supported? Why?

Time Duration. It refers to the time period and the "working-hours" that were required for the curriculum design.

- Was there any explicit timetable for the curriculum design?
- How much time was finally required? More or less than what the timetable had scheduled?
- How was the time distributed?
- Which planning activities required more than the allotted time and why?

Material and Technical Infrastructure. It refers to the extent and the quality of material and technical infrastructure that was used for the curriculum design.

- What kind of material and technical infrastructure was used for the curriculum design?
- Were modern sources of information used (internet, e-books, digital material, etc.)?
- Were all the available materials (graphic matter, photocopying machines,

computers, printers, etc.) provided in the curriculum designers?

2. Curriculum Background. The curriculum designers are supposed to take into consideration the characteristics of the previous curriculum (or of a similar one), as well as the results of previous evaluations.

Former Curriculum. It refers to the construction and the characteristics of the former curriculum which was replaced by the new one.

- Which were the basic principles, philosophy, content, structure and the characteristics of the previous curriculum?
- How much does the new curriculum differ from the old?
- Are any elements of the old curriculum found in the new one? If so, what are they?

Evaluative Background. It refers to the evaluation estimated during the basic curriculum design.

- Was there any evaluation of the old curriculum?
- Were the evaluation results taken into consideration by the experts that drew up the new curriculum? If so, what changes did they implement?
- Were there any diagnostic, formative and summative evaluations in the new curriculum?
- If not, why? If so, what were their results?
- 3. Curriculum Design and Support. The curriculum should be designed in order to correspond with the modern social, political, economic and educational conditions and it should be supported in every possible way.

Origin and Functional Connections. It refers to the way that curriculum is correlated with national or over-national policies, with socio-economic

changes or wider educational innovations.

- Why was the curriculum designed? What need is it designed to fulfill?
- What other innovative, educational or social actions are associated with the new curriculum?
- Are there any non-educational reasons that led to the design of the particular curriculum?

Framework of Design. It refers to the political, social, economic, cultural and educational framework in which the curriculum was designed and developed.

- What were the political conditions when the curriculum was designed and what was their influence on it?
- What were the dominant social or cultural tendencies and how did they influence the curriculum design?
- What was the dominant ideological and philosophical framework around education during the period that the curriculum was designed and how did they influence its design?

Structure and Diarthrosis. It refers to curriculum structure and diarthrosis.

- What are the structural characteristics of curriculum?
- Was any particular model of design adopted?
- Does it allocate separate subjects (courses)? If so, what are they?
- How, why and by whom, were the particular subjects selected?

Supportive Material. It refers to the curriculum's accompanying educational material.

What kind of educational material is required for curriculum accomplishment?

- Is this material suitable, certified, current and sufficient?
- Do all students and teachers have access to it?

Training. It refers to the information and the training of teachers with regards to curriculum.

- Are teachers sufficiently informed about the curriculum?
- Have special seminars for the purpose of training teachers, principals and school counselors around the curriculum, been organized?
- Does the teachers' specialization correspond to the curriculum requirements?

Diffusion. It refers to the notification of basic curriculum principles to educational and non-educational institutions.

- What types of information do the respective educational or social institutions offer with respects to the curriculum?
- How well informed are the opinions of the parents, guardians or the public at large, around the curriculum?
- What are the first reactions of teachers and social institutions regarding the curriculum?

Legality and Ethics. It refers to the legal and moral dimension of curriculum content.

- Was curriculum designed on a moral and legal base?
- Are there any points that may offend morally certain students or teachers?
- Are there any teaching activities that can potentially place students and teachers in physical, emotional or in any other kind of danger?
- Is the curriculum philosophy based on diachronic values or on ideas and

perspectives of specific individuals or groups?

Evaluation Criteria Referring to the Curriculum Text

1. Curriculum Theoretical Framework. The theoretical framework of curriculum is supposed to be based on modern pedagogic theories and to be in accord with the national and European educational principles.

Program Theory. It refers to the educational theory which is promoted via curriculum.

- Which of the basic curriculum theories does the particular program adopt?
- What is the specific "program logic" associated with the curriculum?

Correspondence. It refers to curriculum correspondence with the basic principles and directions that distinguish the Greek and European educational policy.

- Does the program correspond to the aims of Greek education as they are described in the official educational texts?
- Is curriculum in accord with the educational directions of the European Union?
- Does it promote the skills that are considered basic by Greek and European educational policy?

Inclusiveness. It refers to the pedagogic approach of students belonging in specialized categories.

- Does curriculum include educational activities for talented and gifted students?
- Are students with special training difficulties, or those who suffer from disability or mental deficiency able to

- follow the curriculum's educational activities?
- Is the curriculum suitable to be used by both foreign students and students from other religious backgrounds?
- Does the curriculum promote political, cultural, racial, religious and social equality?
- 2. Curriculum Intention. The aim and objectives of the curriculum are expected to cover a wide range of pedagogic priorities and to correspond to the individual and social needs of students and teachers.

Origin. It refers to the process of determining both the general and special aims of the curriculum.

- Were the sources on which the intent of the curriculum was based authentic (ideal for education, scientific principles, etc.)?
- Did students, teachers, parents or other social institutions participate in the process of determining the aims and objectives of the curriculum?

Extent and Hierarchy. It refers to the classification of the educational objectives covered by curriculum.

- With respects to educational aims and objectives, what categories does the curriculum cover?
- In which way are these objectives classified?
- Are the curriculum objectives focused on issues around skills related to sentimental and social survival, cognitive acquisition and the requirements of a professional environment?
- Which categories of objectives are not covered by the curriculum?

Curriculum Response. It refers to the extent that the intention of the curriculum is determined

based on the needs, interests and wishes of those directly or indirectly involved with the educational process.

- Do the aims and objectives of the curriculum correspond to the needs and the interests of students and teachers?
- Are the aims and objectives of the curriculum in accordance with parents' wishes?
- Are the aims and objectives of the curriculum in accordance with the requirements of the local and national community?
- 3. *Curriculum Content*. The curriculum content is supposed to be explicit, scientifically valid, diachronic, alternative and to correspond to the biological and intellectual age of the students.

Linguistic and Intellectual Clarity. It refers to the style of writing, the vocabulary, the terminology and the concepts contained within the curriculum text.

- Is the curriculum text comprehensible to the teachers?
- Does it include unknown, obscure or ambiguous lexical items or concepts?
- Are the teaching activities and the projects explained sufficiently and in detail?
- Which words or terms are repeated often in the curriculum text, and why?

Duration and Flexibility. It refers to the curriculum's "ability" to remain current or to have the ability for direct readjustment of all the developments and junctures.

- Is the curriculum content characterized diachronic?
- Does the curriculum provide the teacher with the opportunity to develop educational projects concerning

- unpredictable situations or current events?
- Is there any possibility of direct readjustment of the curriculum content by the state?

Cohesion and Interconnection. It refers to the cohesion of curriculum content and in the interconnection between different cognitive items.

- Is there reasonable connection and cohesiveness between the curriculum contents?
- Does the content move from simple to complex and from concrete to abstract?
- Is the curriculum content of a cognitive item interrelated with the content of another cognitive item? If so, then how are they interrelated?
- Is there a logical connection between the educational grades?

Level of Difficulty. It refers to the harmonization of curriculum content as it pertains to the intellectual and biological age as well as the cognitive skills of the students.

- Do the majority of students correspond effectively to the level of difficulty within the curriculum content?
- Are there alternative seminars for those students considering the program either extremely easy or very difficult?
- Does the curriculum promote individualized teaching?

Scientific Validity. It refers to the level of objectivity and the scientific methodology around the documentation of the information and knowledge contained within the curriculum.

• Are the knowledge and the information reported in the curriculum scientifically precise, valid and documented? • Are teachers and students referred to in the curriculum, the relevant official sources?

Intellectual Emancipation. It refers to the level of conventionality that characterizes the curriculum content.

- Does the curriculum content promote alternative or multiple ways of thinking and acting to students?
- Does the curriculum content correspond to students' multiple intelligences?
- Are subjects or questions that constitute challenges or are considered taboo for teachers and students included in the curriculum?
- 4. Teaching Principals and Means. The teaching methodology promoted by the curriculum and the means of how it is to materialize is supposed to be in accordance with modern teaching theories.

Theoretical and Methodological Harmonization. It refers to the curriculum's harmonization with suitable, modern and/or alternative teaching and learning theories.

- Are the proposed teaching methods designed and organized around the curriculum's intention?
- Are the elements representing modern cognitive, teaching and training theories and practices included in curriculum?
- Are concrete models of teaching adopted?

Level of Freedom. It refers to the possibilities provided to the teacher for self-acting and for undertaking initiatives.

• Are teachers free to apply the curriculum in their own way?

- Is self-activity—the undertaking of initiatives or innovative activities—by the teachers-encouraged?
- Are the teaching actions adapted so that they can be developed by all teachers?

Organization of Teaching Means. It refers to the use of teaching means and associated aids that support the teaching process.

- Which instructive, teaching or communicative means are proposed by the curriculum for the teaching process?
- Are they functional, suitable and certified?
- Are they available in all schools?
- What are the sources that serve as instructive support for teachers?
- Educational Activities. The educational activities proposed by curriculum have to correspond to the program's philosophy, must be realistic and equally addressed to all students and teachers.

Nature and Organization of Activities. It refers to the educational activities proposed by the curriculum.

- What types of activities are proposed by the curriculum?
- What kind of preparation is required by the teacher for the implementation of these activities?
- Are motives provided to the students?
- Are students provided with an opportunity to pursue out-of-school and life-long activities?
- Is the collaboration of students with local, national factors or cyber partners promoted?

Possibility for Accomplishment. It refers to the realistic level that distinguishes the curriculum's educational activities.

- Is the allotted teaching time sufficient in order for the educational activities proposed by the curriculum to materialize?
- Do all schools have the appropriate infrastructures, equipment and the aids that are needed for the proposed educational activities to materialize?
- Does the school staff have the qualifications and the support required for the materialization of educational activities as proposed by the curriculum?

Technological Utilization. It refers to the promotion and utilization of new technologies.

- Is the development of skills regarding handling the New Technologies by students promoted?
- Are the moral, political, social and other technological dimensions concerning each cognitive item examined?
- How necessary is the use of New Technologies for the curriculum application?

Assessment. It refers to the development of assessment and self-assessment activities for those involved in the educational process.

- Are assessment and self-assessment activities of students' performance promoted via curriculum?
- Are the techniques of performance assessment objective and fair to all students?
- Are teachers encouraged to develop alternative assessment techniques for students' personal performance?
- 6. Null Curriculum. Curriculum is expected not to exclude important educational and/or social parameters (knowledge, skills, attitudes, activities, etc.).

Absent Curriculum Aspects. This refers to the content or variables that are absent from curriculum.

- What kind of objectives, content, educational activities, teaching actions or educational aids are not included in the curriculum?
- Are there any similar curricula that may include additional structural elements? If so, what are they?

The application of the previously mentioned criteria and the answers to the related questions are expected to supply evaluators with information regarding the merit, worth and overall significance of curriculum in Greece. It can be emphasized that the above criteria should be regarded as neither a given or unique, nor should they be regarded as a "recipe of evaluation." curriculum The particular investigative questions of the criteria are indicative, in that they show the direction that an evaluator should move towards when conducting an evaluation.

Special Evaluation Criteria of the Intended Curriculum in Greece

Apart from the general evaluation criteria that may be compatible with many curriculum types, the formulation of subject specific criteria will also be required. These will be exclusively related to the curriculum, that the evaluation process is specifically designed to cover. These are determined criteria through collaboration of people who are in charge of the program and the evaluating team.

In the case of the present study, and after personal contacts with the people in charge of designing the new curriculum in Greece, certain special evaluation criteria were formulated that could constitute the dimensions of merit for the present curriculum. These criteria were finalized after a meeting with the chairman of the Greek Pedagogic Institute, who was in charge of designing and developing the C-T.U.C.F. and I.S.C.⁷

Special Evaluation Criteria

Structural Updating and the Actualization of Significant Knowledge. This refers to the effort of the Pedagogic Institute of Greece to have each cognitive item acquire its own curriculum. Moreover, it refers to the actualization of "significant knowledge," through its united and multi-dimensional presentation curriculum.

The Rationalization of the Teaching Material. This is in reference to the rationalization (reduction) of the quantity of teaching material that currently exists.

The Cross-Thematic Approach. It refers to the cross-thematic approach of knowledge, which is promoted through the new curriculum in Greece. According to the curriculum designers, the cross-thematic approach was based on the search of conceptual interconnections between the respective courses for each grade and the organization of cross-thematic activities that to the holistic contribute approach knowledge.

Zone of Flexibility. This refers to extra-curricular activities that draw a connection between school knowledge and students' interests or any personal challenges that they may face.

The Projects. They refer to the curriculum's enrichment through a series of scenarios of knowledge investigation, combined with crossthematic, co-operative and discovering activities.

For further information, the dimensions that differentiate the new curriculum from what existed before as well as well as the defined dimensions of its merit are in the following link: schools.gr/download/programs/depps/english/3rd_c.pd

Reinforcement of Pedagogic School Environment. This concept refers to the Greek state's effort to encourage creativity, imagination, critical thought and students' collaboration through the new curriculum.

Introduction of New Technologies in School. Refers to the new curriculum's objective to include new technologies in all learning activities as a tool of learning, communication and creation.

The Updating of Students' Assessment. It refers to the designers' intention for the new curriculum to organically connect assessment and self-assessment with all the existing teaching processes.

The Improvement of Literacy. This refers to the Greek state's intention to improve the various types of literacy (reading, mathematics, scientific) in order for Greek students to be properly prepared for international educational exams (PISA, TIMS).

Updating Through New Textbooks. It refers to the updating of school textbooks based on the new curriculum's principles and philosophy, so as to have a more significant interconnection between the pedagogic intentions of the state and the scholastic reality.

Among the previously mentioned special criteria, it was the cross-thematic approach that captured the interest of the majority of those in charge of the Pedagogic Institute of Greece. This is evident in the fact that this concept is the focal point of the new curriculum's philosophy.

Conclusion

On a broad level, it appears that the C-T.U.C.F. and I.S.C constitute the first systematic and simultaneously completed effort of the Greek state in forming a united curriculum framework of which the principles determine the curriculum and the structure of each cognitive item. Moreover, the writing of new school

textbooks cannot be overlooked, for this was done in an effort to be in harmony with the equivalent curriculum.

A basic conclusion that can be derived from the present study is the necessity for a systematic curriculum evaluation such as that which has been recently applied in Greece. Studying the data that resulted from the research, a point deserving further investigation is the fact that the official Greek state has never conducted a systematic curriculum evaluation before.

An important element offered by the particular study, is that for the first time future evaluators are provided with a composed "plan of direction" around the evaluating process that is Greek curriculum specific. The proposed criteria (general and specific) cover a wide but not complete spectrum of dimensions of the new curriculum's merit, however, it is evident that through appropriate transformation, each of these criteria can be further developed so that they can form a curriculum evaluation process for other educational rungs (third degree, technological, etc.).

The issue of curriculum evaluation in Greece is still in the initial stages of investigation, a fact that requires the development of further studies around this matter. Perhaps, in other countries most of the questions concerning the curriculum evaluation have been answered, however, in Greece the quest has only begun.

References

American Evaluation Association. (2004). Guiding principles for evaluators [Brochure]. Fairhaven, MA: American Evaluation Association.

Coryn, C. L. S. (2007). Evaluation of researchers and their research: Toward making the implicit explicit. Unpublished doctoral dissertation, Western Michigan University, Kalamazoo.

Cross Thematic Curriculum for Compulsory Education. (n.d.). Available at http://pischools.gr/download/

- programs/depps/english/3rd_c.pdf, 28/02/2009.
- DeRoche, E. (1987). An administrator's guide for evaluating programs and personnel: An effective schools approach. Boston, MA: Allyn and Bacon.
- Flouris, G. (2006), Evaluation of curriculum. In *Comparative and international educational review*, vol. 7, pp. 93-125, (in Greek).
- Henderson, J. G., & Hawthorne, R. D. (2000). Transformative curriculum leadership. New York, NY: Prentice Hall.
- Hill, J. C. (1986). Curriculum evaluation for school improvement. Springfield, IL: Charles C. Thomas.
- Kassotakis, M. (2004). Curriculum reform in secondary education during 1990-2002: Attempts and problems. In T. Papakonstantinou & A. Lambraki-Paganou (Eds.), *Curriculum and educational work in secondary education* (pp. 21-60). Athens, University of Athens (in Greek).
- E. Curriculum Krikas, (2007),evaluation: Development, application and assessment of intended curriculum evaluation process in education. doctoral Unpublished dissertation, of Primary Department Education, University of Crete, Greece (in Greek).
- Law, no. 3374/2005 "Quality Assurance in Higher Education" http://www.alfavita.gr/tritobatmia/tritob23.htm 28/02/2009.
- Nowakowski, J., Bunda, M., Working, R., Bernacki, G., & Harrington, P. (1985). *A handbook of educational variables: A guide to evaluation.* Boston, MA: Kluwer.
- Official Journal of the European Union, no. C 151 of 06/16/1992 pp. 0003 0004, http://eur-lex.europa.eu/ JOIndex.do?ihmlang=en, 28/02/2009.
- Official Journal of the Hellenic Republic, 1366 Issue. B', 18-10-2001.
- Official Journal of the Hellenic Republic, 303, Issue B', 13-03-2003
- Official Journal of the Hellenic Republic, 304, Issue B', 13-03-2003

- Sanders, J. R. (2000). Evaluating school programs:

 An educator's guide. Newbury Park, CA:
 Corwin Press.
- Scriven, M. (1991). Evaluation thesaurus. Newbury Park, CA: Sage.
- Shepherd, G. D., & Ragan, W. B. (1982). *Modern elementary curriculum*. New York, NY: Holt, Rinehart and Winston.
- Skager, R., & Dave, R. H. (1977). *Curriculum* evaluation for lifelong education. Oxford: Pergamon Press.
- Stufflebeam, D. L. (1973). Evaluation as enlightenment for decision-making. In B. Worthen & J. Sanders (Eds.), *Educational evaluation: Theory and practice*. Worthington: Charles A. Jones Publishing Company.
- Stufflebeam D. L. (2001), Evaluation models. In G. T. Henry & J. C. Greene (Eds.), *New directions for evaluation*, no. 89, Jossey-Bass, San Francisco.
- Valverde, G. A. (2003). Curriculum International. In Guthrie, J.W. (ed.), Encyclopedia of Education, vol. 2, MacMillan Reference USA, New York, pp. 524-529.
- Walker, D. F. (2003), Fundamentals of curriculum: Passion and professionalism. Mahwah, NJ: Lawrence Erlbaum Associates.
- Worthen, B. R., & Sanders, J. R. (1987). Educational evaluation: Alternative approaches and practical guidelines. New York, NY: Longman.