Abstracts

Chapter I

The Unity of Approach in the New Curricula
by: George Nahas

Curricula are not a goal by themselves, rather, they are a means to help those involved in education to develop the individual in the hopes of developing society and serving the nation. This development aims at developing unity in the personality of the learner. Hence, this study primarily identifies the difference between “approach”, being the reference which is in the basis of educational unity, and “methodology”, that arises from it and adapts to the demands and specifications of a certain subject, and between various technicalities that lend themselves to implementation and adaptation to special cases. Then, this study explores the extent to which the new curricula respect the unity of approach, on which it is possible to build the nurturing of the Lebanese learner where the goals are concerned, as well as on the content and technical levels. Finally, the study points out the extent to which it is possible for the new curricula to fulfill these “unifying” needs.

Chapter II

An Overview of the New Evaluation System: Using Competencies in Evaluation
by: Fawzi Ayoub

This study investigates using competencies in the new evaluation system in the first and second cycles of the education ladder. It attempts to clarify the educational and intellectual backgrounds for the newly developed evaluation system through an analysis of the experiences and documents produced by the
Evaluation Committee established by the National Center for Educational Research and Development. We have attempted to answer some of the questions regarding evaluation by competencies, facilitated and automatic promotion, periodic assessment, and supportive educational services for students in need of educational assistance. This study concludes that it is necessary to set an objective review of the evaluation procedures that have been carried out in schools and to reconsider the issues that have not matured yet or those that the teachers have not become familiar with.

Chapter III

A Critical Review of the Pre-School Curriculum

by: Fadia Hoteit

This paper explores a number of the factors that may have influence the development of the new pre-school curriculum. It identifies a number of negative points, namely the absence of a solid theoretical framework, general nature of the curriculum, lack of relationships with society, avoidance of any specific educational approach, ambiguities regarding the notion of mother-tongue, and some contradictions that have caused discrepancies between the goals and content of the curriculum. On the other hand, the paper recognizes the correspondence between the curriculum and international trends in pre-school education as well as its attentiveness to the various cultural backgrounds of children.
Chapter IV
Nature of Science: What Is It? Why Is It Important? And What Attention is it Accorded in the New Lebanese Science Curriculum?
By Fouad Abd-El-Khalick

The present paper attempts to shed some light on the meaning of the phrase "nature of science" (NOS) in the context of K-12 science education. The paper also explores justifications for the inclusion of NOS as a central goal in science curricula. Finally, the paper attempts to appraise the importance that the new Lebanese science curriculum accords to this valued aspect of science education, as well as the potential of this curriculum for informing Lebanese students about NOS.

Chapter V
Scientific Literacy in the New Lebanese Science Curriculum
by: Saouma BouJaoude

What are the different definitions of scientific literacy? How can we analyze science curricula to find out whether or not they have the potential to prepare scientifically literate individuals? This paper addresses the above questions and investigates the balance of scientific literacy themes in the new Lebanese science curriculum in an attempt to find out whether or not this curriculum has the potential to prepare scientifically literate citizens. To accomplish this task, the introductions, objectives, and activities of the Lebanese science curriculum were analyzed and categorized using a framework consisting of 4 Aspects: The knowledge of science, The investigative nature of science, Science as a way of knowing, and Interaction of science, technology, and society (Aspect 4).
Results of the analysis showed the following: 1) Except for the general objectives of science, the emphasis in the Lebanese curriculum seems to be on The knowledge of science, The
investigative nature of science and the Interactions of science, technology, and society aspects of scientific literacy. This is a consistent pattern across all the levels and subject areas. However, while some of the objectives of the different levels were under the aspect of Science as a way of knowing, this aspect is almost absent at the level of instructional objectives and activities.

Chapter VI

The Concept of Matter in the Fourth Year of Basic Education

by: Jawad Nizam

An analysis of the curriculum and its details, the textbook, and the teachers' manual published by the Center for Educational Research and Development has shown that "matter" is used to denote different scientific, technical, and everyday meanings. Moreover, this analysis has shown that these documents do not consider students' cognitive and conceptual development because they suggest a definition of matter that has no relation to students background knowledge or to their notions of "matter" and "thing".

Chapter VII

The Biotechnology of In-Vitro Fertilization at the First Secondary Level

by: Iman Khalil

This study investigates the approach used to present the biotechnology of In-Vitro Fertilization in the new curricula and textbook of the first secondary level. It also addresses issues related to students' conceptions of In-Vitro Fertilization and to teacher preparation related to the subject.

Students need to have acquired pre-requisite basic theoretical and technical concepts related to In-Vitro Fertilization before they can understand this technique. However, an analysis of the biology curriculum (until Grade 10) and the textbook has shown that these basic pre-requisite
concepts are absent from both. This study shows that teachers were not prepared properly to teach this technique and that they were unable to teach it because the curriculum was too long. Moreover, students were found to lack the pre-requisite knowledge to understand this technique. This study concludes by doubting the appropriateness of the decision to include In-Vitro fertilization at the first secondary level without adequate teacher preparation and without taking into consideration students' pre-requisite knowledge.

Chapter VIII
Pollution in the Science and Environmental Education Curricula at the Secondary Level

by: Zalfa El-Ayouby

This study shows that the subject of pollution appears in the second part of the first year secondary as well as in the second year secondary, Humanities section, and third year secondary, Humanities and Social and Economic Sciences sections more than it does in the General Science and Life Science sections. Also, pollution appears in chemistry and life and earth science more than it does in physics. Furthermore, the topic of pollution has been introduced randomly in the curriculum and certain pollution problems appear in different subjects to the neglect of others.

Additionally, this study suggests that the environmental education curriculum lacks focus in certain areas and confuses poisonous and nuclear wastes and thermal and atmospheric pollution. We conclude by recommending a balanced coverage of pollution in all subject areas and across the three years of the secondary school level.
Chapter IX

Innovations in the Mathematics Curriculum and Requirements for Teacher training
by: Antoine Dagher

The purpose of this paper is to determine the basic content of teacher-training programs in order to implement the new mathematics curriculum in light of recent innovations in this curriculum. In the first part of this paper, we present briefly the changes that have occurred since the 1960’s in the field of teaching mathematics and, particularly, in the domains of curriculum design and teacher training. The study then examines the new mathematics curriculum and attempts to point out some of its main characteristics as well as the changes it includes. In the second part, we try to shed light on the situation of mathematics teachers and to deduce the changes necessitated by the new curriculum and the role of teachers in the learning process. Finally, we deal with the requirements and content of teacher training programs.

Chapter X

Bridging the New Mathematics and Informatics Curricula
by: Iman Osta

This paper adopts as a framework the educational theories which call for coordination among the various domains of school knowledge. Specifically, it examines the new Mathematics and Informatics curricula in an attempt to identify possible connections between them. The aim is to shed light on the common concepts and operations in order to increase learning in both subjects. The paper identifies a major connection between the two subjects, namely the Logo language medium, as it analyzes the nature of the connections that this medium makes possible in the objectives, the content, and the methods of teaching. In addition, the paper suggests other
connections and provides examples of possible learning situations in Mathematics by using spreadsheets - tools that are part of the Informatics curriculum.

Chapter XI

On the Informatics Curriculum

by: Hussein Yaghi

This research maintains that one of the advantages of the new curricula in Lebanon is the introduction of a new subject-informatics- to be taught at the intermediate and secondary level at the rate of one hour per week. Yet, despite its importance, this step remains deficient due to the following reasons:

1. One hour is barely enough to train students in using the computer to acquire such basic skills as electronic typing and drawing.

2. The new curriculum overlooked ways of introducing the computer as a means of teaching other subjects, although it is a known fact that there are great potentials in this respect.

3. The curriculum focuses on training students in using computer skills more than it focuses on developing such intellectual skills as problem-solving and decision-taking.

4. The curriculum does not allocate any instructional time for using computers at the elementary level although it is well known that there are many opportunities to use the computer at this level.

Finally, this research questions the value of textbooks and curricula if computers are unavailable in schools.
Chapter XII

Ways of Expression in Foreign Language Textbooks: The Needs, Processes and Goals
by: Henry Awaiss

The subject of expression is related to the learner’s abilities in organization, composition, and analysis. It is not separated from language. Rather, expression and language interact so that the learner can achieve clarity and precision in oral and written expression. The need of the subject of expression is pressing as learners are unable to take notes as well as plan, summarize, and analyze. In fact, these topics are mentioned in the textbooks and required in the curriculum. Yet, the question of how to apply and learn these topics is rather overlooked. As for the process, it proceeds as follows: observation and exploration, conversation, and finally creativity. The harmonic teacher-student role manifests itself as they master this process.

Chapter XIII

Comments on Arabic Grammar Textbook for Grade four of the Basic Education Cycle
by: Abdel Fattah El-Zein

The purpose of this study is to critique some of the rules of the Arabic Grammar Textbook- Fourth Year / Basic Education-issued by the Educational Center in 1998. In some cases, we found some errors that have been passed from one generation to another. In other cases, we found some gaps that the authors have deliberately kept in order to present the book in its current form- something that turned out to be problematic. We also intended to critique the texts used in the book from the standpoint of language and structure and as examples of the rules under study rather than assess them based on difficulty or simplicity or whether or not they suit the student's mental, social, or psychological level.
Chapter XIV

Comments on the Arabic Literature Curriculum for the First Secondary Year
by: Riad Kassim

This research deals with the domains specific to examinations and the sample of the Arabic tests; in addition to the question of evaluation which is still in the realm of multiple theories as it has not seen any steps towards practical implementation. The research is based on the teacher training program at the secondary level in Bekaa and the series of discussions in secondary schools and debate conferences. It maintains that teachers are affected negatively with regard to the assessment of learning. As for the issue of preparation and training, the research indicates that there are many complaints concerning the shortcomings of training. The shortcoming result from the lack of an organized comprehensive plan and the nonexistence of scientific standards and criteria for choosing trainers and providing training material.

Chapter XV

The Prospects and Problems of the New Lebanese English Language Curriculum
by: Ghazi Ghaith and Kassim Shaaban

This paper describes the prospects and problems of the English language curriculum proposed by the National Center For Educational Research and Development back in 1997 and is currently being implemented nation-wide. The paper maintains that the curriculum is in line with international standards as it has clear goals, objectives, and performance indicators as well as sound perspectives on instruction, material selection and adaptation, and evaluation guidelines. These perspectives are
based on widely-accepted theoretical views and effective applications in second language education. However, the curriculum demands a high level of content and pedagogic knowledge from teachers, and necessitates adequate resources and continuous training.

Chapter XVI

Training Teachers for the Pre-School Curriculum

by: Najla'a Bachour

The new curriculum for the pre-school level has given teachers freedom in performing their job provided that they relate the students' environment to their interests, prior experience, and developmental level. To be able to perform this task, teacher training should include equipping teachers with knowledge concerning child development and the child's way of learning through interaction with his/her environment. This is confirmed specifically by the findings of new brain research. Moreover, special skills need to be developed in order to make the teacher's role more effective. This kind of training should aim at achieving basic changes in the teacher's attitude, mainly due to the fact that teachers are used to a teacher-centered rather than a child-centered approach to teaching and learning. Yet, what has been accomplished in the area of teacher training thus far does not satisfy requirements due to time shortage and lack of proper content.
Chapter XVII

Training Secondary School Teachers in the Subject
Civic Education

by: Suzan Abdel Rida

This research deals with the following issues:
1. The administrative and organizational structure of training within the framework of the Plan for Educational Reform.
2. The general and specific goals for training secondary school teachers in the subject of civic education.
4. The social and educational dimensions in the subject of civics education.