

Elementary school curriculum reform in Turkey

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This paper aims to examine the nature of the new elementary school curriculum in Turkey. In particular, the authors provide a coherent picture of the fundamentals, basic elements and the classroom implications of the new curriculum development initiative in five content areas: mathematics, science, social science, life science, and Turkish. This paper discusses the fundamental principles underlying the curriculum reform, including social, individual, economical, and historical and cultural aspects. In addition, the paper addresses the main motivators: Turkey's integration with the European Union, major issues with Turkish students' academic performance in national and international arenas which led the curriculum change. It is believed that the implementation of the new curriculum will give new insights to the policy makers, classroom teachers, students, parents and other related parties. The results of the implementation of the curriculum will open new opportunities for researchers to identify the strengths and drawbacks for further improvements.

Curriculum reform, fundamentals of curriculum, Turkey, education system, elementary school

INTRODUCTION

To become the member of the European Union (EU) constitutes one of the main long lasting political objectives of Turkey since independence (Isiksal, 2005). For instance, the founder of modern Turkey, Mustafa Kemal Ataturk, emphasised upon the significance of Europe for Turkey's future and modernisation. For this purpose, the modern Turkey made fundamental amendments such as abolition of the religious Khalifa institution, foundation of the Western style education system, and replacement of the Arabic alphabet with the Latin alphabet. In consequence, Turkey is able to become the only democratic and secular state within the Muslim world.

In order to maintain further and consolidate this political objective and preference, Turkey became the member of the West European based organisations such as the Council of Europe in 1949, and the North Atlantic Treaty Organisation (NATO) in 1952. As a complementary attempt in this vein, Turkey applied to the European Economic Community (EEC) for membership (following the application of Greece) in 1959. The most prominent and remarkable result of these aforementioned efforts was the initiation of full membership negotiations with the EU on September 4, 2005.

There is little doubt that the EU is the most successful union among the societies of states. EU membership is highly desirable since it promotes fundamental changes in socio-economic and political life. As a result of this transformation, the societies are expected to become more integrated, more prosperous, more autonomous and more democratic in addition to the highest achievements in terms of human rights.

Departing from these statements, Turkey could benefit in many ways from the EU membership. For instance, as a requirement for EU membership Turkey has to fulfil the Copenhagen and Maastricht criteria. These criteria would help Turkey to re-organise its governmental administration, branches, and activities in transparent, less bureaucratic, more accurate and efficient ways with the progressive spread of the rule of law and democracy. In addition to reorganisation in political, institutional, economical and social arenas, education will be considered as a critical component. In 2003, a new curriculum change movement began in Turkey based on the improvements of the information society, teaching episodes and relations with European Union countries. The schools cannot disregard the influence of information and communication technologies on mathematics, science, production, society, politics, education and also lifestyle. Thus, enhancing globalisation encourages the assumption of globalisation.

This paper, in general, focuses on the educational reform movements in Turkey. In particular, it describes and discusses the curriculum reform in elementary (Grades 1 to 8) school curriculum which started in 2003. The elementary school curriculum is being implemented in five school subjects; mathematics, science, social science, life science, Turkish. One of the major motivations for this curriculum improvement is to reach ideal international standards of education implemented in Europe, North America and East Asia. For instance, the new curriculum aims at creating learning environments, where students can share their ideas and actively participate, relating various disciplines to each other, and using different teaching methods within the enriched environment (MNE, 2005a; 2005b; 2005c; 2005d; 2005e).

From the outset, the new curriculum was closely linked with the in-service training, improvement of the infrastructure of school units and it gave particular interest to the basic requirements of children's knowledge and skills, their learning, emotions, attitudes, interests, self-confidence, beliefs, anxiety, self-regulation, psychomotor development and social skills. Next, a brief overview of the Turkish educational system is presented.

TURKISH EDUCATIONAL SYSTEM: A BRIEF OVERVIEW

Curriculum studies in Turkey have an extensive background that goes back to the early mid-nineteenth century when the first general elementary school curriculum was introduced (Varis, 1996). In the twentieth century, there were more systematic innovations in curriculum development studies starting with the establishment of the Republic in 1923. A year later, in 1924, with the Law of Common Education, the Ministry of National Education became the only authority responsible for the operation of all educational institutions (Gozutok, 2003). Considering the needs of the newly established Republic, initial curriculum development studies in elementary education (The Primary School Curriculum) began just after the Law was put into effect. After a two-year implementation of the curriculum, a major revision was accomplished by considering the needs of the country and developmental characteristics of students. The revised Primary School Curriculum was in effect for ten years until a new round of curriculum development studies were conducted in 1936. In the following years, due to climate changes in the economical, political, and social structures of the Turkish society, a need arose to revise the curriculum; as a result, in 1948, the curriculum faced new changes. The principles of the Primary School Curriculum were rearranged and grouped under four elements: social, individual, human relations and economics (Binbasioglu, 1995).

In 1962, there was another curriculum initiative to align the existing content of the curriculum to the necessities of the society and country. In the 1962 model, the 14 different subject fields of the 1948 Curriculum were grouped under five content areas according to their relations. This model also was so flexible that the consumers of the curriculum could alter the program according to the needs of the local community (Karagoz, 1965). The 1962 Curriculum was in use for six years. During this time frame, classroom teachers, academicians from universities and other curriculum experts continuously monitored the implementation process and revised the program. The

revisions were finalised in 1968 and officially approved as the 1968 Curriculum. Later, in 1982, a new program model was presented by the Ministry of National Education. This program was prepared through collaborations with universities. The rapidly changing nature of the society, technology and culture resulted in a new wave of curriculum change in the early 1990s under the guidance of the National Education Development Project supported by the World Bank. With this project, it was planned to develop high quality instructional materials and textbooks for improving the level of schooling in Turkey. As a result of these efforts, in 1993, a new curriculum was adopted by the Department of National Educational Research and Development of Education (EARGED) in cooperation with the National Education Development Project. Between 1993 and 2003, revisions were carried out in individual content area curricula. For instance, the mathematics curriculum in 1998 and the science curriculum in 2000 were considerably revised. Lastly, in 2003, new curriculum studies concerning five content areas, including mathematics, science, social science, life science, and Turkish were initiated by the Ministry of National Education. In this paper, we will describe and discuss the fundamentals of the new curriculum initiative. It is noted that we use the terms curriculum and program interchangeably. Being a continuous process, evaluation and pilot studies of the new curriculum, and development of the instructional materials are still in progress.

THE NEW CURRICULUM

The new curriculum is designed as part of a larger scale curriculum reform initiative in Turkey that includes five subject matter areas: mathematics, science, social science, life science and Turkish. The curriculum is designed for each of the courses under the guidance of a common set of fundamentals with four components, (a) Social, (b) Individual, (c) Economical and (d) Historical and Cultural fundamentals. The Turkish Ministry of National Education (MNE) proposed that the fundamentals would serve as an umbrella guiding the overall initiative (MNE, 2004a). In this paper, our focus is to discuss the common fundamental ideas and classroom practices in all the five subject matter areas. Thus, when we use the term curriculum or program, we refer to these common points. It is not within the goals of this study to examine each content area curriculum separately.

A quick overview of the four components indicates that the MNE targeted a large area of interest. Although each component characterises a unique fundamental aspect of the curriculum, there are considerable overlaps among them. In particular, the social, and the historical and cultural components are drawn from the same roots of the Turkish society. It is also implied that the MNE does not only value the cultural and social roots, but also the individuality of students. The curriculum reform is initiated as an attempt to improve students' personality development as well as their social development. It may even be perceived as a paradigm shift in the Turkish educational system to put a considerable amount of emphasis on individuality considering the fact that the dynamics of the Turkish socio-cultural system do not encourage individual development as much as social development.

The Turkish curriculum development process is no more different than what has been accomplished in other parts of the world. An overview of the recent literature indicates that different nations have implemented curriculum reforms according to their social, cultural and economic needs, but it seems that their main purpose is to increase the quality of schooling (Flouris and Pasiadis, 2003; Huang, 2004). Huang (2004) explains the importance of seven goals to be addressed within China's curriculum reform. These are establishing the new curriculum philosophy, developing educational objectives, renewing educational content, reconstructing a model of curriculum organisation, innovating in curriculum materials, establishing an active mode of teaching and instruction, and establishing a new system of curriculum evaluation. Huang also emphasised six strategies to accomplish these goals. These strategies are improving the system of curriculum management, redeveloping the mechanism of curriculum reform, promoting

school-based curriculum development, integrating information technology with curriculum, emphasising teachers' professional development, and encouraging the whole nation's participation in the reform. In their critical appraisal of the curriculum reform in Greece between 1980 and 2002, Flouris and Pasiadis (2003) reported that the curriculum reform efforts were based on textbook, teaching practices, teachers' scientific and pedagogical preparation, usage of multiple instructional resources and media, and evaluation process. Likewise, the new Turkish school curriculum reform was built on a set of fundamentals, essential elements, and components of the teaching and learning process. We describe and discuss those fundamentals, elements and components in the next sections of this paper.

Prior to presenting the discussion about the fundamentals of the program, it is noted that various official documents published by the Ministry of National Education are used as reference materials to present and discuss the components and developmental process of Turkish elementary school curriculum (MNE, 1996; 2004a; 2004b; 2004c; 2004d; 2005a; 2005b; 2005c; 2005d; 2005e). Thus, we do not cite those documents at anytime, but we use them in the paper. They are our main primary resources.

Fundamentals of the New Curriculum

Following the overall discussion of the fundamentals, the next section provides a separate presentation of the four components. The goal is to inform the reader about the underlying aspects of the fundamentals of the program.

Social Fundamentals

The social fundamentals of the curriculum assume that children are social individuals. Based on this main assumption, it is acknowledged that children are influenced by a diverse group of environmental factors, including family, school, peers, and other people around them. The curriculum provides a collection of means for guiding students to adapt to the environment they live in. Additionally, it is within the goals of the new program to promote students' moral development with an emphasis on certain values, including the social norms, such as modesty, fairness, honesty, patience, faithfulness, tolerance, and respect. In light of these aspects, the new curriculum, in particular, aims at

- improving students' psychological, social, moral, and cultural development within their own sociocultural contexts;
- reminding students of their rights and responsibilities and raising individuals who are in harmony with the society's internal institutions such as family, school and government;
- raising awareness on social, economical and political issues surrounding the society and the outside world such as economic crises, natural disasters, international conflicts and environmental pollution;
- raising awareness on education of gifted and handicapped students;
- raising awareness on democratic values and human rights within the society;
- placing considerable emphasis on character education for individual and social happiness; and
- placing considerable importance on recreational and physical activities as part of students' cognitive, psychomotor and affective development.

Individual Fundamentals

One of the main goals of education is to nurture a society which consists of individuals who can effectively create solutions to academic and real life problems. That is why the new curriculum

places a considerable amount of emphasis on raising individuals who recognise problems and develop appropriate solution strategies. Thus, the program aims to identify instructional objectives that enhance students' problem solving skills. The objectives for the improvement of the individual fundamentals are stated as follows:

- acknowledging each student as a separate human being with his or her own personal characteristics;
- providing opportunities for life-long success in academic, professional and personal development;
- allowing experiences to enhance personal satisfaction and professional achievement through intrinsic motivation reinforcement;
- creating environments that promote life-long skills such as creativity, entrepreneurship, and scientific, analytic and critical thinking;
- raising awareness on psychological and physical health;
- placing considerable emphasis on metacognitive skills; and
- providing learning experiences to support multiple perspectives.

Economical Fundamentals

It is within the goals of the new Turkish school curriculum to acknowledge the importance of economical and financial issues in a national and global world. Based on this acknowledgement, the curriculum aims to provide learning experiences for the students to understand and adapt the rapidly changing world in terms of economic and financial aspects. In particular, the new curriculum aims at:

- allowing experiences to enhance economic development around the nation;
- taking measures to decrease the economic gaps across the geographical regions;
- taking measures to supply the manpower required that are based on economic demands;
- encouraging students' entrepreneurship; and
- encouraging product-oriented activities.

Historical and Cultural Fundamentals

It is essential to include culture in the curriculum to acknowledge cultural diversities of the members of the society. It is critically important and extremely difficult for teachers to include cultural components in the curriculum (Banks, 1995; Chan, 2006). The new Turkish elementary school curriculum places emphasis on the historical and cultural fundamentals of the Turkish society. In particular, the program claims to allow students to reflect on history and take lessons from it for the future. Additionally, it is thought that education is a social activity that needs always to consider cultural and historical characteristics of the society through:

- basing the philosophy of the education system on Ataturk's principles: Republicanism, Nationalism, Populism, Etatism, Reformism, and Secularism;
- raising awareness and supporting cultural, national and social norms;
- considering the national history as a guide for the future; and
- acknowledging cultural and fine arts as the mediums for individual development and socialisation.

Major Elements of the Curriculum Reform

Being inspired by the above fundamentals, the new curriculum is mainly set up on a number of major elements for supporting the individual and social development of the members of the society. The major elements are stated as follows:

- effective usage of the mother language;
- giving importance to cultural and artistic values;
- being enthusiastic on reading and life long-learning;
- expressing ideas and thoughts straightforwardly;
- supporting parent involvement in schooling;
- effective usage of at least one foreign language;
- effective usage of information technologies for educational purposes;
- promoting collaborative work and communication;
- being aware of the changes in the environment and adapting to these changes;
- self-awareness of one's own duties and responsibilities;
- being open to the opportunities and challenges along the way in an increasingly global world;
- generating original and creative ideas on given occasions; and
- being intrinsically motivated to follow rules and regulations.

The Learning and Teaching Process as Envisioned by the New Curriculum

The new program not only sets out the main fundamentals essential for the accomplishment of the philosophy of the curriculum but it also provides suggestions for learning and teaching environments. In particular, it is advocated in the new program that students need to be motivated to discuss, inquire, and be curious about what is going on in their surrounding environment, including family, school and society. It is suggested that student-centred classroom environments need to be designed to increase active participation of students for their own learning. The purpose of student-centred instruction is to replace rote memorisation with learning for understanding (Hiebert et al, 1997). The nature of the instructional tools is proposed as another set of essential elements for learning with understanding. Apart from traditional textbooks, newspapers, journals, magazines, Internet and other resources are introduced as alternative instructional tools. Parents should be part of the teaching and learning process as resource persons.

Furthermore, students should be encouraged to work collaboratively to communicate effectively about and reflect on their learning (Johnson and Johnson, 1990; Hiebert et al, 1997). This can give them a chance to express their ideas and increase self-confidence (Bandura, 1986). Eventually, the new curriculum hopes that students enjoy their own learning. In addition, the curriculum believes and supports extracurricular activities as a critical aspect of student learning.

As a critical aspect of understanding (Polya, 1957), problem solving is introduced as an instructional tool for all subject areas in the new curriculum. Students need to be able to transfer their knowledge to other settings. They need to also acquire the skills to design successfully and implement creative problem solving strategies when they are confronted with new situations. For meaningful student learning, the curriculum suggests teachers consider the outside contextual elements such as life style, economic activities and geographical factors to design classroom tasks. For instance, community projects are highly encouraged by the curriculum. In particular, it

is stated that involvement within the outside community is most likely to enhance students' social, individual and academic development.

The new curriculum acknowledges the contemporary belief that assessment must be integrated into or an essential part of classroom instruction (Romberg, 2004; NCTM, 1995, 2000). According to the curriculum, continuous monitoring needs to be used for program evaluation, and assessing students' knowledge, skill and attitudes. This provides the opportunity to diagnose and remediate malfunctioning elements of schooling at macro and micro levels. At the macro level, the curriculum involves the view that assessment is a valuable tool for the re-organisation and rejuvenation of the school system by examining the relationship among students, teachers and parents. At the micro level, the main focus is on students' cognitive, physical and emotional development. In particular, teachers are responsible for collecting, analysing and interpreting student-level data. The new curriculum suggests that teachers communicate the assessment results to the parents, school administrators and the outer community.

The assessment system as introduced by the curriculum aims at monitoring the process as well as the product (Linn and Miller, 2005). The curriculum also introduces alternative assessment strategies such as portfolios, projects, checklists and other performance-based media of assessment besides standardised and classroom tests for the improvement of the school system. Such assessment techniques are suggested as an invaluable tool to collect information on the process used (for example, problem solving strategies or interpretation of the findings) and product or outcome of the process (for example, completed project work or written report). The traditional assessment techniques such as paper and pencil tests do not necessarily help teachers monitor student progress as much as do performance-based assessment tools (Linn and Miller, 2005; Thorndike, 2005). In essence, the new curriculum takes a radical approach toward improving the assessment system by utilising traditional and alternative assessment strategies. Finally, as indicated by Romberg, reform in the curriculum requires further reform in classroom assessment (2004).

Given the above discussions, the new curriculum was developed to recover the drawbacks and limitations of the old curriculum. The characteristics of the former curriculum are contrasted with the new curriculum in Table 1. As indicated in the table, the new curriculum carries fundamental components of the international reform efforts in education both in Europe and North America (Baki and Gokcek, 2005).

Table 1. A comparison of the old versus the new curriculum

Old Curriculum	New Curriculum
Information does not change.	Information changes
Education is for knowing	Education is for understanding
Teacher as the information provider	Teacher as the facilitator
Teacher as the only decision maker	Teacher and students make decisions
One-way communication	Two-way communication
Product-based	Process-based
School for individual's learning	School for everyone's learning
Parents do not know about education	Parent involvement is essential
Competency-based learning	Community-based learning
Norm-referenced assessment	Criterion-based assessment
Teacher knows the answers	There is more than one solution and the teacher may not know all the answers

The old curriculum perceived the teacher as the centre of the teaching and learning process. In particular, the teacher was identified as the only decision maker, information provider and the authority in the classroom. The overarching goal of the teacher was to transfer knowledge to the students without placing emphasis on understanding. As a result of this perception, students were seen as the passive receiver of the information. This philosophy of the old curriculum did not provide enough opportunities for students to engage in essential thinking processes, including problem solving, multiple representations, communication, and making connections. The

important characteristic of the new curriculum is to provide learning experiences for students with diverse intelligences and abilities. Additionally, the old program placed no emphasis on alternative assessment strategies such as observation checklists, portfolio and other performance-based assessments (Linn and Miller, 2005). In order to address these issues, the Ministry of National Education decided to revamp the old curriculum and replace it with a more reform-based approach that is geared toward students' active involvement in the teaching and learning process.

CONCLUSIONS AND IMPLICATIONS

The purpose of this article is to describe and discuss the recent reform in the Turkish elementary school curriculum. While doing this, we provide a detailed overview of the social, cultural, individual, and economic roots of the curriculum. It is indicated in this brief overview of the new Turkish curriculum that Turkey has caught the momentum of improving its education system. There have been curriculum changes all over the world based on the contemporary approaches toward teaching and learning. Along with this trend, Turkish curriculum developers adapt a reformist philosophy that supports children's active construction of their knowledge through problem solving, exploration, reflection and communication, and other thought-provoking processes that require high level cognitive demand (Stein et al, 1996). Another significant characteristic of the curriculum change is that the content or what to teach is not changed dramatically, but just slightly revised. Thus, a comparison of the old and the new curricula on the surface indicates that both look quite similar in terms of the content they cover; though, opposite to the traditional nature of the old curriculum, the new one brings various characteristics of the reformist movement around the world such as considering interdisciplinary connections, and the use of technology and other instructional tools. As a result, the reformist wave in education has arrived in Turkey and significantly influences the elementary school curriculum. Yet, it is not the only key variable influencing the curriculum change in Turkey. Turkey's long lasting ambitions to be a full member state of the European Union and raise Turkish students' low academic performance have helped the country to reform its political, economic, institutional and educational structures.

The curriculum change initiated other associated movements in the education arena of Turkey. For example, the publication of new textbooks aligned with the curriculum has already been started. For the first time in Turkey, student workbooks and teacher editions are being published to support the student textbooks. In addition to the textbooks, the Ministry of National Education has designed and developed instructional and technological tools and manipulative materials aligned with the needs of the new curriculum. The Ministry of National Education not only places an emphasis on the development of the instructional tools, but also emphasises the effective utilisation of them by teachers and students. In particular, teacher education workshops and seminars are being carried out around the country to inform the teachers about the effective implementation of the curriculum sources. Teacher educators give additional seminars based on teachers' needs and questions about the new curriculum. In addition, experts and program developers give seminars to pre-service teachers as well as parents, and school related communities on the regulation and implementation of the new program.

Pilot studies have been conducted in nine provinces representing the entire country to evaluate the implementation process. Indeed, the curriculum revision is a life-long process. Future research studies, policy documents and teacher input are planned to inform curriculum developers on strengths and weaknesses of the curriculum reform. Thus, it is not enough just to document the goals of the curriculum, but new research needs to be carried out to monitor the implementation of the process. This paper is an initial step to inform the outside education community about the reform of the elementary school curriculum in Turkey.

Effective curriculum implementation and improvement is based on systematic, continued effort at altering learning conditions in the classroom and other internal conditions within the school

(Stewart and Prebble, 1985). Thus, this paper must be supported with additional systematic research studies to document and discuss development of individual content area curricula, including mathematics, science, social science, life science, and Turkish. Furthermore, how these changes in the curriculum directly or indirectly affect the structural, procedural or conceptual development of schooling need to be explored.

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