

Reflections to Future in Primary Education Programs in Turkey

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Abstract

Problem Statement: The rapid development in science and technology today makes changes in the societies, and these changes make growing generations to learn not only the past and today but also to improve projections related to their future. For the individuals to perceive the events and incidents occurring around them, and to achieve a wide understanding of the world past, today and future should be interrelated in the educational programs, and perspectives should be created concerning the future.

Purpose of the Study: The aim of this study is to determine the reflections through future in primary education programs. With this aim in mind, the following questions are asked: what kind of reflections to future were made in 1) the general explanations of Primary education programs (introduction, vision, general aims and the structure of the program), and 2) the elements of the program (Leaning field, themes, achievements, teaching-learning process and evaluation).

Method: This study aiming to determine reflections through future in primary education programs was conducted in a qualitative method of screening models. Documentary analysis technique was applied of qualitative methods in the study. In this study, Life Studies, Turkish, Science and Technology, Social Studies and Mathematics teaching Programs which are in use in primary schools are analyzed, and reflections concerning the future in the mentioned programs are revealed. The data sources of the study are Life Studies, Turkish, Science and Technology and Social Studies programs which were prepared and put into practice by Ministry of National Education. In the study, the reflections to future related to general explanations (Introduction, vision, general aims and the structure of the program), and elements of the program (learning field, themes, achievements, teaching-learning process and evaluation) were determined. The investigations were held on the basis of emphasis and references to future in the programs.

Findings and Results: A lot of reflections to future in "Turkish Teaching Program" and "First Reading Writing Teaching Program" are observed both in explanations parts of the programs and elements of the programs parts. One of the themes of Life Studies Teaching Program "Yesterday, Today, Tomorrow"

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theme is directly related to future. Moreover, some of the skills, personal qualifications and values in the program have features that can be related to future. Although there are a lot of direct reflections to future in the Science and Technology Teaching Program's explanations, not enough reflections could be found in the elements of the program. There are reflections to future in the explanations of Mathematics teaching Program, but in the elements of the program no reflections to future could be observed.

Conclusions and Recommendations: When the results related to programs are handled together, primary school programs are found to have enough reflection to future. When programs are considered; by nature Social Studies Teaching Program has the most reflections to future; Turkish, Science and Technology and Life Studies programs have enough reflections to future; however, Mathematics Teaching program has the least number of reflections to future among all the programs investigated. The following suggestions could be made according to the results of this study; 1) The reflections to future of the primary education programs should be determined by application-oriented studies. 2) How other programs applied in primary education reflect to future should also be investigated. 3) Studies concerning the effects of the reflections of primary education programs to future should be designed.

Keywords: Future, education, education programs.

INTRODUCTION

As in every field, it has become compulsory for educational programs to renew and improve themselves regularly in fast-changing world because this rapid change directs societies in a quest concerning education of a qualified human labor.

Today people who go through an education process are expected to improve qualified enough to make expected changes around them as well as blend into the rapid-changes occurring around them. Thus, the education system should be in a faster change and renewal process than the other social institutions (Demirel, 1996).

The head spinning improvements occurring around individuals necessitate education of people who are able to blend in those changes quickly. That is to say, education that helps individuals to blend in to the society they take part in should direct its course into the future. Naturally, as Varış (1988) mentioned that the children understand and interpret today by examining the past, and with this go towards future will actively help realization of the societal dynamism as expected.

Problem

The world is experiencing the first years of a new millennium. Improvements in science and technology, using mass media more commonly, and having faster transportation change the societal life seriously. The changes occurring in the world follow a two-way course. These changes happening around the world not only ease people's lives but also threaten them.

There are two different points of view concerning future (Eckersley, 1999):

• It is obvious that the future will serve spectacular opportunities. The mastery is to avoid difficulties and make use of opportunities. In other words,

- individuals should make use of opportunities that the future will bring to them.
- In very different time periods in the past, humankind has faced times when different ways crossed each other. While one way lead to sorrow and hopelessness, the other lead to disappearance. To be able to make a true choice, one should have ability to make logical decisions.

Of these viewpoints, the first is realistic and individual, and the second is universal and philosophical. These two viewpoints which could be considered as optimistic and pessimistic share a common point which is being sensitive to understand and analyze the future (Gültekin, 2006).

Undoubtedly, the future should be the main concern of education. If children lack these sensitivity or qualifications, everything in education turns out to be invaluable and impossible to achieve. Education has a directing role in forming better future. There are opportunities to improve these qualifications through educational programs. The duty is on educational specialists and consequently on teachers (Eckersley, 1999).

Thus, in order for new generations who are growing into a rapid changing world to comprehend change and blend in to these changes, first educational systems should renew and improve themselves constantly and regularly. This rapid change directs societies in a constant search in educating a more qualified human labor.

It is obvious that education should be future-focused because education itself is the basis in the preparation for the future, and the sooner the better (Masini, 2002). If it is desired that the students are educated to have a positive viewpoint about the future, the activities to strengthen this should be taken into consideration very seriously (Gidley, 1998). Naturally, the future should be the main concern of education.

Futurism of education is a subject which is a focus of interest for all the educators, and on which most institutions formed commissions and make examinations. Since especially experts of program development are interested in a future where school programs serve for students, they should be aware of the projects related to the events happening in the social life because the question of what the role of education would be in the society in the future is the first and the main question that program developers face. A hesitation in evaluating this critical question leads to abandoning a basic responsibility and deciding on indecisiveness (Wiles and Bondi, 2002).

Schools, in rapid-changing world, should be the leader to create a more exciting and a rosy future, and to educate their own students and the society (Marx, 2001). This function of schools could only be fulfilled via educational programs.

Frankly, the curriculum is bound to and is affected by social forces, philosophical positions, psychotically principles, accumulating knowledge, and educational leadership at its moment in history. The program is completely affected by the effects of fast accumulation of the information. Certainly some adaptations in the school's program ought to be made as results of discoveries of life saving vaccines, inventions such as photocopy machine and the computer, and scientific

accomplishment like the Moon landings, the Mars flights; the Venus, Jupiter, Uranus probes; and other space explorations (Oliva, 1988).

Social dynamism, the process of directing social institutions by improving them at the same time is social engineering which demands viewpoint to transfer to new generations, and scientific attitude. In this respect, most nations in the world today, recognize the aim of education to improve culture as well as presenting it. This aim has made great differences in the teachers' views and methods. In the presentation of the topics, associations of yesterday, today and tomorrow were given importance. Naturally, to be able to understand today's problems is referred to yesterday, and to make plans and projects for tomorrow or having the children think about tomorrow also help children understand those problems. If the children can understand and interpret today by evaluating the past, and to turn to tomorrow with the help of these interpretations would help social dynamism to enter in a positive track (Varış, 1988).

It is an undeniable fact that the future world will be a lot more different than today's. The world of the future will demand individuals who have more different qualifications than today's, and time will be short in preparing the generations of the future. Thus, in order to develop convenient aims to meet the needs, a great effort should be put into practice.

If we accept that we need to prepare for a more vastly different future than we have known, than outstanding of the focus of education also needs to shift. This change will require a curriculum that provides individuals with the disposition necessary to engage in lifelong learning (Costa and Kallic, 2010).

The multi-viewpoints of the students reveal that they not only have the ability to imagine positive future models, but also they are aware of the fact that the creation of the ideal world is the responsibility and activity of the human kind (Gidley, 1998). However, research results claim that education cannot give a new vision to the youth, cannot help them be more socially and environmentally sensitive to a society which is open to improvement, and cannot direct them to a lifestyle that anticipates the dreams related to a better future world. Thus, fulfilling the function of being a bridge among past, present and future is probably the most important duties of education.

Nowadays, there has been a density in studies about the future. It is almost ready to be placed in academic life and education programs (Bell, 2000). Unfortunately, there is a lack of attention in education planning. Discussions concerning the content of the program in professional and academic organizations focus more on topic and methodology other than giving importance to the future (Dalton, 2001). Certainly as Varış (1996, p.88) claimed "we should educate our children in a way that they could blend in new problems and conditions of a changing society other than with a nonsense frustration of longing for past eras". Because if next generations could understand future and learn to improve designs for the future, the education could earn qualifications along with preparing those new generations to better future (Gültekin, 2006).

In conclusion, curriculum specialists in the 21st century face fundamental issues. We must define what role education is to play in our society. We must determine who will be charged with the responsibility of constructing such a mechanism. Finally we must offer viable options for the implementation of such a system (Wiles and Bondi, 2010)

If children and youth are expected to harmonize with the rapid changes more successfully, constraints of time in education should be changed. Today, societies want to have individuals who can overcome the effects of the rapid changes happening around them (Gültekin, 1990). Having individuals who can forecast future, and understand it is only possible with education programs concerning the future. In Turkey, in 2004, Life Studies, Turkish, Science and Technology, Social Studies and Mathematics programs for 1-5 grade students were rearranged in the light of constructivist theory, and put into practice. The primary education program which was put into practice in 2004-2005 academic year has quite different features from previous programs concerning its preparation, main approach and vision. In other words, the constructivist view brought a new viewpoint to the program. Thus, it is highly important to investigate primary education programs in use since 2004 in terms of future, and determine what reflections do these primary education programs have related to future. On the other hand, there are very few studies (Gültekin, 2007; Selvi, 2007; Gültekin, 1990) on education programs and the future in Turkey. This study, in this respect, might be useful in terms of its contribution to education programs and future.

Aim of the Study

The aim of this study is to determine the reflections through future in primary education programs. With this aim, following questions were asked:

- What kinds of reflections through future were made in general explanations (introduction, vision, general aims, and the structure of the program) concerning the primary education programs?
- What kinds of reflections through future were made in elements of primary education programs (field of learning, themes, achievements, teaching-learning process and evaluation)?

Limitations

The study is limited to investigating Life Studies, Turkish, Science and Technology, Social Studies and Mathematics teaching programs of primary school programs.

METHOD

Research Model

This study aiming to determine reflections through future in primary education programs was conducted in qualitative method of screening models. Documentary analysis technique was applied of qualitative methods in the study.

Documentary analysis involves analyzing of written sources containing information about the phenomenon or phenomena to be investigated. It could either be used as a research method by itself or could be used as a secondary source when other research methods are used. According to the problem decided in the study, which documents are important and could be used as data sources are determined. In studies related to education documents such as teaching programs, students and teacher handouts, course books, students records, in or out of school correspondents,

students homework and exams, course and unit plans could be used as data sources. (Yıldırım and Simşek, 2005). In this study, Life Studies, Turkish, Science and Technology, Social Studies and Mathematics teaching Programs which are in use in Primary schools are analyzed, and reflections concerning the future in the mentioned programs are revealed.

Data and Collection

The data were collected using documentary analysis technique. The data sources of the study are Life Studies, Turkish, Science and Technology and Social Studies programs which were prepared and put into practice by Ministry of National Education. The researcher presented the reflections related to future in these programs in general and then decided on the reflections related to future in the dimensions of the programs as achievement, learning field, unit and themes, teaching-learning processes and evaluation. As for the reliability of the study, a different expert from the field was asked to investigate each program separately in terms of the reflections they make about future. The investigations were made taking emphasis and references about future as basis. After this, researcher and experts compared the reflections they determined, and reached common grounds in the determined fields. Data were presented under a different title for each program; reflections concerning the future were interpreted using examples from the programs.

FINDINGS

The results of the study were presented in the order mentioned in the aims of the study, first, the reflections through future in the primary education programs are presented, then the reflections of programs through future concerning achievements, teaching field, units and themes, teaching-learning process and evaluation are explained.

Reflections through Future in Turkish Education Program

When reflections through future in Turkish Education Program are considered, reflections concerning future could be observed in some departments of the program. The "Introduction" title of the program shows that the program has emphasis on the future by saying "The future of individuals and the society who experiences the era of information is dependent on how we reach, use and produce information. Achievement and life-long sustainability of these skills necessitate a contemporary education". Similarly, in the same "Introduction" part, sustainability in Turkish Education is emphasized by adding "In addition to all these, skills like communication, learning making conscious decisions, fulfilling the needs of a contemporary society, sustaining learning are also emphasized. With this view in mind, students in Turkish education are expected to achieve skills that they are going to refer to all their lives".

While the "Vision" of Turkish Teaching Program was presented, it could be claimed that there have been reflections concerning future since life-long learning was emphasized. As a matter of fact, the vision of the program is presented as; "Turkish Course (1-5 grades) Teaching Program was prepared aiming to help students gain intellectual skills of reading, writing, listening, speaking, visual

reading and visual presentation that they can use **all their lives**, improve themselves individually and socially by using these skills, communicate effectively, learn, gain habit of reading and writing willingly and with a love of Turkish". In addition to these, it is also possible to see that direct reflections through future are made by saying "With this program that aims to educate students of today and **future**...", and "A society which consists of individuals that use information technologies, produce and shape the **future**".

Under the "Structure of the Program" title of the Turkish Teaching Program in "Learning Fields" emphasis on the future could be observed. These are ordered in the program as:

Listening: "Students who learn by listening use their skill as a learning tool all their lives".

Speaking: "Such activities are important in terms of improving the skills that children would use all their lives".

Reading: "Thus, studies should be conducted in order to improve reading skills and have them used for a **lifelong learning**".

Writing: "Writing as in reading has a very important place in human life".

The "**Achievements**" title of the program shows that the program has emphasis on the future. Achievements where reflections through future were made are as follows in terms of *Grades*, *learning fields and activities*:

1. Grade Achievements

Field of Learning Speaking - Expressing oneself verbally

Explanations: 2.2. "While ordering the events, they could be asked to use expressions like first, later, then, at the end, as a result etc. here tense in action will be dealt with meaning side, tenses will not be presented. For example, "he ran" expresses a finished event, "he is running" expresses a **continuous event**, and "he will run" expresses a future event.

Field of Learning Writing - Expressing ones view in writing

Explanations: 2.7. "Tense in action should be dealt only in terms of meaning but tenses should not be taught extensively. For example, "he ran" expresses a finished event, "he is running" expresses a **continuous event**, and "he will run" expresses a future event.

Examples of Activities: 2.21. a) "With the question "What kind of a parent would you like to be in the future?", the students could be asked to write about their thoughts and feelings.

Writing Appropriate to Genre, Method and Techniques

Examples of Activities: 3.6. "Students could be asked to imagine how they would be different from now after ten years, and write about their imaginations".

5. Grade Achievements

Field of Learning Speaking - Expressing oneself verbally

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Examples of Activities: 2.24. "Students could be asked to write about what the life on earth would be like twenty years later or how technology would **change life**".

Under the "Program Guide" title which was prepared in order to guide, users have reflections into future.

Reflections to future can be seen in the program guide, in "Turkish Teaching According to Constructivist Approach" title by saying "...thus, learners are expected to understand, interpret, produce and sustain these skills all their lives other than memorizing the information."

Again in Turkish Teaching Program, under "Teaching-Learning Process" title a direct reference to future was made by saying "Teaching-Learning Process" should be given enough importance in order to let students improve their language skills, sustain their learning all their lives and educate individuals of future".

There are direct and indirect reflections to future in "First Reading-Writing Program" which is an important dimension of Turkish Teaching Program. In this respect, there are direct reflections to future in "Introduction" of the program. The reflections are: "In educating students of today and future, the aim of first reading-writing teaching is not only help students gain reading and writing skills but also to improve intellectual skills like thinking, understanding, processing, interrogating, classification, relating, analyzing, synthesizing, and evaluating. In this process, improving skills like using Turkish truly, nicely and effectively, communicating, problem solving, decision making, and sustaining life-long learning are also expected".

There are reflections to future in the scope of preparation to writing under "Preparation to First Reading-Writing" title of First Reading-Writing Program as "Holding a pencil: Holding a pencil has a divergent importance in first reading-writing teaching. The skills that students improve at this stage will sustain all their lives."

The investigation made in both Turkish Language Teaching Program and First Reading-Writing program made it clear that both programs have reflections to future with future references. The reflections related to future are important in order that they reveal that these programs are not indifferent to the subject.

Reflections to Future in Life Studies Teaching Program

Predictions to future are taken into consideration in the preparation of the program by saying "Views which were put forward in another meeting where the title was 'Creating the Future' which non-governmental organizations took part in the "Introduction" title of Life Studies Teaching Program, among the subjects considered in the preparation of Life Studies Teaching Program.

It is possible to see reflections to future under "Program Vision" title of Life Studies Teaching Program. As a matter of fact, it could be seen that there are reflections to future indirectly by saying "The vision of this program is to educate individuals who are flexible and happy so as to blend into changes dynamically, and are equipped with tools needed for the era, life skills, and basic knowledge needed in daily life with the help of activities where teachers would only guide students other than transferring the information directly, and which students could achieve only by their own effort through most of the time allocated for Social Studies Courses."

Reflections related to future could also be seen under the title "Fundamental Approach and Structure of the Program" in Life Studies Teaching Program. In this respect, the following explanation concerning the constructivist approach used in the preparation of the program has reflections to future as "According to this approach, learning is interpreting and structuring previous knowledge with the help of new experiences and living. According to constructivist learning approach; while trying to understand world people evaluate the new information and they could either digest, arrange or refuse the new information".

The frame of Life Studies Teaching Program consists of "Learning Fields" and "Themes". The themes of three learning fields decided as individuals, society and nature are My Excitement for School, My Unique Home and Yesterday, Today and Tomorrow themes. As seen Yesterday, Today, Tomorrow theme is the one that emphasizes the future. In other words, the understanding to make connections among yesterday, today and tomorrow which are expected from teaching programs is completely fulfilled by Life Studies Teaching Program.

The "Skills" that students gain in Life Studies Teaching Program cover features that emphasize future. As a matter of fact, "terms like critical thinking, creative thinking, researching, problem solving, communication, using information technologies, entrepreneurship, decision making, effective use of sources, selfmanagement, recognizing basics of science" hold reflections to future directly or indirectly. These skills and the reflections in their sub-skills could be classified as follows:

Decision-making

- Deciding on the subject matter to make a decision
- Thinking about the possible results of the given decision

The skill of effective use of sources

- Being a conscious consumer
 ✓ Budgeting weekly and monthly with the given pocket-money (allowance)
- Developing conscious for the environment, and planning and producing by using the sources effectively

- Planning and producing
 - ✓ Guessing the trends possibly to appear in the future
 - ✓ Determining the duties to achieve
 - ✓ Following and applying a plan or a decision
 - ✓ Managing time effectively

Self-management

- Determining the Aim
 - ✓ *Imagining things to achieve truly*
 - ✓ Planning the steps to achieve each aim
 - ✓ Determining the time needed to realize the aim
- Career Planning
 - ✓ Realizing the skills improving through time
 - ✓ Realizing how the professions that are in demand change through time
 - ✓ Realizing new occupations could be needed according to the conditions in the future, and guessing what these occupations could be
- Perceiving time and space correctly
 - ✓ *Identifying past, present and future tenses*
 - ✓ Planning time
- Leadership
 - ✓ Determining vision and aim and designing them
 - ✓ Organizing people in order to achieve pre-determined aims

Recognizing basic concepts of science

- Change
 - ✓ Realizing that every creature in the environment is changing and this is natural
 - ✓ Realizing that time changes, and understanding the changes related to time
- Continuity
 - ✓ Realizing that life never ends

Openness to Renewal among "**Personal Qualifications**" that students are expected to have in Life Studies Teaching Program is directly related to the future. Sub-qualifications of openness to renewal qualification are as follows:

- Researching for renewals and changes from past to present
- Imagining and designing the future
- Creating new ideas

Reflections to future could be observed in "Connections with Intermediary Disciplines". In this respect, achievements like "Behaviors in accordance with the conscious show that preserving the environment and transferring it to future generations is a civic duty." in "Human Rights and Citizenship intermediary Discipline; "realizes the skills improve in time", "realizes change and improvements in himself and others." in Developing Career Conscious intermediary

discipline; "realizes what people need in order to sustain their lives." in Protection from Disasters and Safe Life intermediary discipline reflect to future indirectly.

There are reflections to future under "Achievements" title in Life Studies Teaching Program. The classification of the reflections related to future according to grades, themes and activity examples are as follows:

1. Grade Achievements

My School Excitement

A.1.4. "Plans how to spend one of his days and stick to that plan."

Yesterday, Today, Tomorrow

C.1.1. "Recognizes the past, present and future **tenses** and use them appropriately."

Activity: A story emphasizing the words "Yesterday", "today" and "tomorrow" Students are expected to express the story using yesterday, today and tomorrow in their own words."

C.1.15. "Research and explain in what ways people change the environment and what they do in order to achieve it."

2. Grade Achievements

My Unique Home

B.2.11. "Makes daily and weekly plans by using time expressions correctly, and stick to that plan."

Yesterday, Today, Tomorrow

- C.2.21. "Researches what living things need in order to stay alive."
- C.2.2. "Recognizes what kind of a change he went through in time by comparing the things he can or cannot do now different from the past"
- C.2.1. "Recognizes how physical appearance of himself, his friends, and members of his family **changes** through time."
- C.2.5. "Researches the games that elders in the family played when they were children, and recognizes **the differences** by comparing them to the games he and his friends play."
- C.2.19. "Researches and explains what kind of differences in the buildings there are when compared to the past."

3. Grade Achievements

My Unique Home

- B.3.3. "Plans his dream house and defines it with the help of art."
- B.3.12. "Expresses his feelings, thoughts and expectations about his dream job with the help of art."
- B.3.22. "Prepares daily and weekly work plans by ordering the works to do according to the importance, and sticks to that plan."
- B.3.44. "By realizing that all the people share the same world although they have differences, recognizes that each individual has duties to accomplish in order to create a better world."

Yesterday, Today, Tomorrow

C.3.4. "Asks questions related to the points to consider while choosing his future job."

Activity: *My Dream Job:* Members of the group ask what job each would choose in the future and try to learn about the skills and qualifications needed for that job. Volunteers could share their answers with the class. They answer the questions related to the future on the worksheet which is given to them.

C.3.10. "**Produces ideas** about the things to do in order to protect, strenghten and improve our Republic."

Activity: If I Were: Students are asked to **imagine** themselves as the president of our country. They are asked to prepare a project of the things they could do If they were the president.

- C.3.11. "Researches how transportation vehicles changed through time and presents what he finds out."
- C.3.12." Designs a technological device from the **future**, and presents it smoothly and genuinely,"

Activity: *Imagine Future:* They design a technological device with the materials they bring. Students prepare a guidebook on the name, function, specifications and how to use it.

- C.3.14. "Researches what kind of a **change** occurred in communication technologies from past to present."
- C.3.15. "Researchers the **past and present** of the place he lives in, and determines the differences and similarities between them."
- C.3.28. "Recognizes the **change and continuity** happen because of the movements of the earth."
- C.3.29. "Recognizes the **change and continuity** happen according to time periods belonging to seasons."
 - C.3.29. "Designs a technological device and produces."
- C.3.32. "**Designs a project** in order to make the environment he is in a cleaner place."

A number of reflections to future could be observed in various departments of Life Studies Teaching Program. As mentioned before, the theme "Yesterday, Today, Tomorrow" is directly related to the future. Moreover, some of the skills, personal qualifications and values in the program carry features that could be counted as reflections. It is also obvious that the activities suggested in the program have features to have students think about the future. Keeping these in mind, it is fair to say that Life Studies Teaching Program has succeeded in setting a balance for yesterday, today and tomorrow.

Reflections to Future in Science and Technology Teaching Program

There are direct references to future under "**Program Vision**" title of Science and Technology Teaching Program by saying "Rapid social, technological and scientific improvements which are experienced today, changed our lifestyles. The effects of scientific and technological improvements could be observed so clearly that they have never been before in the past. Globalization, international economical

competition, rapid scientific and technological improvements will continue to affect our lives **in the future** as well." and "in the science and technology world which is becoming more complex and complicated day by day, educating students as science and technology literate is compulsory in order to prepare them to **the future**."

Direct reflections to future could be observed in "Justification of Science and Technology Program" under the title of "Overall Approach of Science and Technology Program" of Science and Technology Teaching Program by saying "in today's information and technology era where scientific knowledge increases incrementally, technological innovations improve in a very fast pace, and the effects of science and technology could be felt in every area in our lives, it is obvious that science technology education plays a key role for the future of societies." and "by giving examples about the situations where scientific knowledge gathered in science and technology program reflect on technology, and more importantly by providing activities that allow students think about the problems on the use of the given knowledge in daily life, the students are made to achieve knowledge, understanding, skills, attitude and values necessary for technology literacy, and to have them be conscious and accountable citizens who will take responsibilities willingly in the future.

There are reflections to future in other titles of Science and Technology Teaching Program. For example, under "Safety" title of Science and Technology Course Teaching Program, by saying "Teachers should be careful in having students do science and technology activities safely in the classroom, gain knowledge, skills and mental behaviors concerning safety, and give importance to safety in their future lives.", reflections to future have been made. Moreover, reflections to future could be observed in Assessment and Evaluation title as "Determining future learning needs of the students". In Science and Technology Teaching Program by emphasizing "student gender", it is said "Most of the female students accept scientific topics out of their experiences, and think that they will not use scientific information understanding in their future lives."

The aims of the program are given in "Learning Fields and Achievements" title of Science and Technology Teaching Program. Some of these aims are related to future.

- 27. "Understands that science and its technologies could have positive or negative effects on individuals, society and environment."
- 28. "Understands that the applications of science and technologies could be protected by the innovations in science and technology, and the effects which are mentioned could be lessened or completely removed."
- 30. "Understands that technological products and systems could **be used** in order to protect natural resources."
- 35. "Explains that there **could be positive or negative**, or anticipated or unanticipated effects of scientific and technological improvements on individuals, society and environment with the help of examples."
- 36. "Understands that the possible effects of newly designed technological product or systems so that some of the problems that might arouse later **could be prevented** beforehand."

There are skills that might have references to future in "Skills" to make students gain in Science and Technology Teaching Program. As a matter fact, "Prediction" skill consists of "Suggests ideas related to possible results about the future with the help of observation, implication or experiments."

In "Learning Fields" and "Achievements" of Science and Technology Teaching Program not many reflections to future could be observed. There is only one learning field or achievement that has direct reflection to future.

4. Grade

The World and the Universe

2.10. "Researches and presents **precautions to take** in order to prevent air, soil and water pollution."

Although there are direct and related reflections to future in the program, there are not many reflections in achievements when Science and Technology Teaching Program is examined for the reflections to future.

Reflections to Future in Social Studies Teaching Program

There are reflections to future in various departments of Social Studies Teaching Program.

In "General Aims" title of Social Studies Teaching Program, there are indirect reflections to future by saying "determines on the differences and similarities between people, things, events and facts, perceive change and continuity by interrogating historical evidences belonging to different time and space."

In the "Vision" of Social Studies Teaching Program, reflections to future were made by saying "The Vision of Social Sciences Teaching Program is to educate Citizens of Turkish Republic of 21. Century who embraces contemporary principles and reforms of Ataturk, comprehends Turkish history and culture, equipped with basic democratic values and respectful to human rights, sensitive to the environment, form, uses and organizes information in a social and cultural context by interpreting it with experiences (thinks critically, creative, decision maker), have social attendance skills, and have methods which social scientists use while producing scientific information, active in social life, productive, knows his rights and responsibilities."

There are reflections to future in "Basic Approach of the Program" title of Social Studies Teaching Program. It says "The program shows awareness to the improvement of expected behaviors of individuals by shedding a light on the students' future lives." and "aims to raise students as physically and mentally healthy physically and mentally, and happy individuals."

Among the "Skills" that students need to gain in Social Studies Teaching Program, are skills that reflect to future. As a matter fact, "critical thinking, creative thinking, researching, problem solving, communication, using information technologies, observing, entrepreneurship, decision-making, perceiving time and chronology skills and perceiving change and continuity skills" are the skills consisting of reflections to future. Especially, the sub-skills of "perceiving time and chronology skill" is "discriminating tenses (past, present and future tense); using time expressions correctly, is doing chronological ordering and forming a timeline;

"perceiving change and continuity skill" is "perceiving continuity and change happening through time, finding alternative solutions to the solution of a historical problem."; "entrepreneurship skill" is "understanding the important role of education on their own future, and presenting innovative ideas and designing products." and "observation skill" is "to be able to use the things they observe as data in studies or to make plans for the future." and they reflect future directly.

"We can make predictions about the future. For example, it is possible that our population will grow in the coming years." is said in "Interpreting Basic Statistical Data Skill" under "Examples of Skills to be taught directly" title of Social Studies Teaching Program.

Among the "Concepts" taking place in Social Studies Teaching Program has concepts like "change and continuity" and "century".

Reflections to future could be observed in Social Studies Teaching Program in "Learning fields", "Units" and "Achievements".

There are reflections to future in the following learning fields of the program:

"People, Places, Environments": 4th and 5th grade students will get to know the place they live in, and will search for answers to questions how, why, where and what could happen in the future in this learning field. Interrogating the role that people have in the place they live in, they will learn to be sensitive to environment, the importance of the environment, and that it is important to protect the environment not only for themselves but also for the society and the life in the future.

"Time, Continuity and Change": this learning field meets the need to understand the roots and place that they occupy in time of students, and helps them establish the connection between **past-present-future**. Students understand who they are, events happened in the past, how to connect with the past, how the world changes and its future position.

"Global Connections": students will gain the qualification of being a conscious individual who follows the agenda of the improving world, produces solutions to the problems to be faced.

The 5th grade unit "*Dream Come True*" among the "**Units**" in Social Studies Teaching Program calls future to mind.

The following shows The "Achievements" in Social Studies Teaching Program focusing on grade, learning field and activities:

4th Grade

Science, Technology and Society

- Understands the improvement of the technological devices he/she uses in time.
- Compares and contrasts the past and the present by paying attention to the changes that technological devices make to our lives and the environment.

Activity: "The World of Tomorrow": A project work is held concerning future technology.

5th Grade

Production, Distribution, Consumption

• **Produces new ideas** based on production by co-operating.

Activity: "I Produce, and Sell": By designing a product marketing **projects** are prepared.

Science, Technology and Society

• Discusses the effects of discoveries and technological devices to our public life.

Activity: "From Where To Where": **A brainstorm** is made to put forward the effects of technological advancements to our lives.

As in Science and Technology Teaching Program while there are a lot of reflections to future in Social Studies Teaching program, there are not many reflections in achievements.

Reflections to Future in Mathematics Teaching Program

In various programs of Mathematics teaching program Reflections to future could be observed.

There are direct reflections to future in "Introduction" title of Mathematics Teaching Program by saying "Ones who understand and do mathematics in our changing world, have more chances in shaping the future."

In the "Vision" of Mathematics teaching Program are indirect reflections to future by saying "Raising individuals who can use mathematics in their lives, solve problems, share solutions and thoughts, take part in a team work, have self-confidence in mathematics, and improve positive attitude against mathematics is very important. In this respect, teaching mathematics is considered as a rich and comprehensive process in mathematics program."

The "General Aims" of Mathematics Teaching Program are expressed in future tense. For example: "students will be able to use guessing and solving problems mentally skills actively.", "students will improve problem solving strategies, and use these in solving daily problems." and "students will establish models, and associate those models with verbal and mathematical expressions." As seen, the aims of the program reflect to future.

As in other courses' programs (Turkish, Life Studies, Science and Technology, Social Studies), helping students gain the skills of "critical thinking, creative thinking, communication, problem solving, researching, decision making, using information technologies and entrepreneurship" it is aimed in "Skills" title of Mathematics teaching Program as well. All these skills reflect to future either directly or indirectly.

When Mathematics Teaching Program is analyzed according to future reflections, it can be seen that the introduction, vision and general aims of the program have reflections to future, but learning field, achievements, teaching-learning process and evaluation items do not make reflections to future.

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

Education which is originated to future by nature is a very important institution in raising new generations who are future focused because children are members of the future. The ways to raising future focused generations are education programs. If children are expected to have a positive view related to future, education programs are the ones to provide this. Thus, education programs should develop understanding and attitudes concerning future in children.

The results of this study gathered from the data could be summarized as follows:

- A lot of Reflections to Future In Turkish teaching Program and First Reading Writing Teaching Program are observed both in explanations parts of the programs and elements of the programs' parts.
- One of themes of Life Studies Teaching Program "Yesterday, Today, Tomorrow" theme is directly related to future. Moreover, some of the skills, personal qualifications and values in the program have features that can be related to future. Activities that are suggested in the program have features to have students think about future.
- Although there are a lot of direct reflections to future in the Science and Technology Teaching Program's explanations, not enough reflections could be found in the elements of the program.
- As in Science and Technology Program, although there are a lot of direct reflections to future, in the Social Studies Teaching Program's explanations, not enough reflections could be found in the elements of the program.
- There are reflections to future in the explanations of Mathematics teaching Program, but in the elements of the program no reflections to future could be observed

When the results related to programs are handled together, primary school programs are found to have enough reflections to future. When programs are considered; by nature Life Studies Teaching Program has the most reflections to future; Turkish, Science and Technology and Social Studies programs have enough reflections to future; however, Mathematics Teaching program has the least number of reflections to future among all the programs investigated. Moreover, most reflections were made in general explanation parts of all the programs.

When findings of the study are taken into consideration, it is clear that new primary education programs reflect yesterday, today and tomorrow understanding better, and emphasize future more when compared to past programs. However, in Gültekin's (1990) study, the primary education program is found to reflect today more. Furthermore, in Selvi's (2007) study the result that the aims of Science Teaching Program of the year 2000 are directed to future matches up with the findings of this study because there is a consensus that science teaching program of the year 2000 forms the background of Science and Technology Teaching Program of the year 2004.

The following suggestions could be made according to the results of this study:

- The reflections to future of the primary education programs should be determined by application-oriented studies.
- How other programs applied in primary education reflect to future should be also investigated.
- Studies concerning the effects of the reflections of primary education programs to future should be designed.

REFERENCES

- Bell, W. (2000). Futures studies comes of age twenty five years after: The limits to growth. *Futures*, 33 (1), 63-76.
- Costa, A. L.& Kallic, B. (2010). It takes some getting used to: Rethinking curriculum fort he 21st century. *Curriculum 21: Essential Education for a Changing Wold*. (Edited by.Heidi Hayes Jacobs). ASCD Publication.
- Dalton, L. C. (2001). Thinking about tomorrow: Bringing the future to the forefront of planing. *Journal of the American Plaining Assocation*, 67 (4), 397-402.
- Demirel, Ö. (1996). Eğitimde yeni arayışlar. Yeni Türkiye. Sayı 7, 47-52.
- Eckersley, R. (1999). Dreams and expectation: Young people expectation and preferred futures and their significance for education, *Futures*. 31 (1), 73-90.
- Gidley, J. M. (1998). Prospective youth visions through imaginative education, *Futures*. 30 (5), 395-408.
- Gültekin, M. (2007). Educational programs and student opinions about the future". *Journal of Futures Studies*, 12(1), 41-60.
- Gültekin, M. (2006). Eğitimde güncel bir kavram: Gelecek. *Kuram ve Uygulamada Eğitim Yönetimi*, 46, 61-83.
- Gültekin, M. (1990). Eğitim programlarında geleceğe ilişkin motifler ve öğrencilerin gelecekle ilgili tepkileri. Yayınlanmamış yüksek lisans tezi. Ankara Üniversitesi Sosyal Bilimler Enstitüsü.
- Marx, G. (2001). Educating children for tomarrows world. *The Futurist*, 35(2), 43-49
- Masini, E. B. (2002). A vision of futures studies. *Futures*, 34 (3-4), 249-259.
- Oliva, P. F. (1988). *Developing the curriculum*. (2nd ed) Scott, Foresman and Company.
- Selvi, K. (2007). Future aims of science curriculum for primary school. *Cultura*. *International Journal of Philosophy of Culture and Axiology*, 8.
- Varış, F. (1988). *Eğitimde program geliştirme: Teori ve teknikler*. Ankara: Ankara Üniversitesi Eğitim Bilimleri Fakültesi Yayınları.
- Wiles, B. and Bondi, J. (2002). *Curriculum development: Aguide to practice*. (6th ed) NewJersey, Merrill Prentice Hall.
- Wiles, B. and Bondi, J. (2010). *Curriculum development: Aguide to practice*. Boston: Pearson Education Inc.
- Yıldırım, A. and Şimşek, H. (2000). Sosyal bilimlerde nitel araştırma yöntemleri. İkinci Baskı. Ankara: Seçkin Yayınları.

Türkiye'deki İlköğretim Programlarında Geleceğe İlişkin Yansımalar

Özet

Problem Durumu: Günümüzde bilim ve teknolojide meydana gelen hızlı değişmeler, toplumların yapısını değiştirmekte, toplum yapısında meydana gelen değişmeler ise yetişmekte olan kuşakların yalnızca geçmiş ve bugünü değil; geleceği de kavramasını ve geleceğe ilişkin projeksiyonlar geliştirmeyi öğrenmelerini zorunlu kılmaktadır. Bireylerin çevrelerinde olup biten olgu ve olayları algılayabilmeleri ve geniş bir dünya görüşüne ulaşabilmeleri için de eğitim programlarında dün, bugün ve yarının bağdaştırılması ve geleceğe yönelik perspektiflerin oluşturulması gerekmektedir.

Araştırmanın Amacı: Bu çalışmanın amacı, ilköğretim programlarında geleceğe ilişkin yansımaları belirlemektir. Bu amaçla: 1) İlköğretim programlarının genel açıklamalarında (giriş, vizyon, genel amaçlar ve programın yapısı) ve 2) ögelerinde (öğrenme alanı, temalar, kazanımlar, öğretme-öğrenme süreci ve değerlendirme) geleceğe ilişkin nasıl yansımalar yapılmıştır? sorularına yanıt aranmıştır.

Yöntem: İlköğretim programlarında geleceğe ilişkin yansımaları belirlemek amacıyla yapılan bu araştırma, tarama modelinde nitel yöntemle gerçekleştirilmiştir. Araştırmada nitel yöntemlerden doküman analizi tekniğinden yararlanılmıştır. Bu bağlamda ilköğretim okullarında uygulanmakta olan Hayat Bilgisi, Türkçe, Fen ve Teknoloji, Sosyal Bilgiler ve Matematik Öğretim Programları analiz edilerek söz konusu programlarda geleceğe ilişkin yansımalar ortaya konmaya çalışılmıştır. Araştırmanın veri kaynağını Milli Eğitim Bakanlığı tarafından hazırlanarak uygulamaya konan Hayat Bilgisi, Türkçe, Fen ve Teknoloji ile Sosyal Bilgiler Öğretim Programları oluşturmaktadır. Araştırmada programların genel açıklamalar (giriş, vizyon, genel amaçlar ve programın yapısı) ve programın ögelerinde (öğrenme alanı, temalar, kazanımlar, öğretme-öğrenme süreci ve değerlendirme) geleceğe ilişkin yansımalar belirlenmiştir. İnceleme, programlarda geleceğe yönelik vurgu ve göndermeler temelinde yapılmıştır.

Bulgular: Gerek Türkçe Öğretim Programı gerek İlk Okuma-Yazma Öğretimi Programına yönelik inceleme, her iki öğretim programında da programla ilgili açıklamalarda ve programın ögelerinde doğrudan geleceğe yönelik yansımaların olduğu görülmüştür. Hayat Bilgisi Öğretim Programının çeşitli bölümlerinde geleceğe ilişkin yoğun yansımalar gözlenmiştir. Programın temalarından biri olan "Dün Bugün, Yarın" teması doğrudan gelecekle ilgilidir. Ayrıca, Programdaki becerilerden, kişisel niteliklerden ve değerlerden bazıları da doğrudan gelecekle ilişkilendirilebilecek özellik taşımaktadır. Fen ve Teknoloji Öğretim Programı ile

Sosyal Bilgiler Öğretim Programında programla ilgili açıklamalarda doğrudan ve oldukça geleceğe yönelik yansıma bulunmasına karşın kazanımlarda yeterince yansımaya rastlanmamıştır. Matematik Öğretim Programında; programın genel amaçlarında geleceğe yönelik yansımalara yer verildiği; ancak programın ögelerinde geleceğe ilişkin yansımaların yer almadığı görülmüştür.

Sonuç ve Öneriler: Programlara yönelik inceleme bulguları genel olarak ele alındığında ilköğretim programlarının geleceğe yönelik yeterince yansıma içerdiği sonucuna ulaşılmıştır. Programlar açısından bakıldığında doğası gereği Hayat Bilgisi Öğretim Programının yoğun olarak, Türkçe, Fen ve Teknoloji ile Sosyal Bilgiler Öğretim programlarının ise yeterince geleceği yansıttığı, Matematik Öğretim Programının ise diğer programlara göre daha az gelecek yansıttığı anlaşılmıştır. Araştırma sonucunda şu öneriler getirilmiştir: 1) İlköğretim programlarının geleceğe yönelik yansımaları uygulamaya yönelik araştırmalarla da belirlenmelidir. 2) İlköğretimde uygulanan diğer programlarının da geleceği ne ölçüde yansıttıkları araştırılmalıdır. 3) İlköğretim programlarının geleceğe yönelik yansımalarının öğrenci davranışı ve özellikleri üzerindeki etkisine yönelik araştırmalar desenlenmelidir.

Anahtar Sözcükler: Gelecek, eğitim, eğitim programları.