

Perceptions of Elementary School Teachers Concerning the Concept of Curriculum^{*}

Bunyamin Yurdakul^a

Ege University

Abstract

As the meaning that teachers attribute to curriculum includes important data concerning curriculum development as well as affects their teaching process, this study investigated the perceptions of elementary school teachers regarding the concept of curriculum. The participants of the study, which was carried out using the phenomenological design, were determined using typical case and maximum variation sampling techniques. The data which was obtained from 26 participating elementary school teachers was collected using a semi-structured interview form consisting of questions on perception and concept analysis. The qualitative data set was subjected to content analysis using an inductive approach. The findings were organized under two categories, namely, curriculum perception as a product of experience and the structural meaning of curriculum experience. The results of the study showed that elementary school teachers perceive curriculum as a theoretical text, political text, scope (content), or as guide books prepared by publishers, and that the curriculum is shaped in practice. In addition, the codes making up curriculum fidelity in the teaching process were grouped under two themes, adaptation and adoption. The study has found that in order for elementary school teachers to be able to adapt the curriculum during the process of teaching, they first need to understand the philosophy of curriculum and be competent at paralleling the curriculum with the context. In other words, they need to understand the curriculum and question the context in which it provides the service of teaching. In this respect, it has been recommended that teacher education programs should be examined in terms of their competency in training teachers who adapt the curriculum, and that the level of curriculum fidelity of a teacher during the teaching process should be studied.

Keywords: Curriculum • Curriculum perception • Curriculum adaptation • Curriculum fidelity • Teacher autonomy • Teacher training • Phenomenology

* This study is revised form of Ege University BAP final report no 07-EĞF-005. Primary findings were presented in the 1st National Congress of Curriculum and Instruction held in Ayvalık on 13-15 May 2010.

a Correspondence

Bunyamin Yurdakul, Department of Educational Sciences, Curriculum and Instruction Program, Ege University, 35040, Bornova, Izmir, Turkey

Research areas: Teachers' curriculum orientation, teacher education, constructivism in education

Email: bunyamin.yurdakul@ege.edu.tr

By attributing meanings to stimuli and matching stimuli to what is known, *perceptions* are created. Perceptions change with the use of changeable concepts defined as the similar or distinguishing features of classified objects, events, or phenomena that are perceived as a result of experience (Barsalov & Goldstone, 1998; Byrnes, 2001; Shunk, 2009; Ülgen, 2001). Concepts provide understanding and are acquired slowly in time through interaction with different objects and situations (Byrnes, 2001).

Curriculum is a concept which was first dealt with as the list of courses (Henson, 2003). It was enhanced in time and gained new dimensions. The meaning attributed to curriculum is influenced by those who define its philosophies, pedagogical approaches or experiences with a concept, and it is associated within the extent of the field of study (Breault & Marshall, 2010; Squires, 2008; Westbury, 2008). Conceptually, curriculum, as any type of instructional effort (Marsh & Willis, 2007), is sometimes the design of the student experience (Brewer, 2007; Dewey, 1916, 1938) or certain objectives that can be reached through the learning experience (Bobbitt, 1918; Flinders & Thornton, 1997; Ornstein & Hankins, 1988), and sometimes it is the required opportunities that give experience in accordance with the objectives (Saylor, Alexander, & Lewis, 1981; Tyler, 1950). In fact, curricula, which include the necessary arrangements for learning to take place, involve predicting the learning process by considering many factors such as the alignment of the individual, the task to be learned, the environment of interaction, the scope, sequence, continuity and balance (Hewitt, 2006) as well as their outcomes (Yurdakul, 2004a).

Curriculum can be seen as the design when it is accepted as a plan (Demirel, 2003), while the implementation process can be considered as the platform where the design is tested (Ertürk, 1998). It has been observed that teachers assume two different approaches, which also shows the meaning that they attribute to the curriculum during their implementation processes. Hewitt (2006) defines the approaches of teachers in curriculum implementation as *adoption* and *adaptation*. *Adoption* tests whether the curriculum is implemented as it is designed or not and focuses on finding the points of failure. This approach depends on the assumption that curriculum is designed by specialists outside the class, and it is considered that changes to be attained by the curriculum can be applied with the linear implementation by the teacher of the curriculum

designed by specialists. *Adaptation* refers to the fact that curricular arrangements could be made by curriculum specialists and real implementers at the class level. This necessitates negotiation and flexibility between the designers and implementers of the curriculum (Pinar, Reynolds, Slattery, & Taubman, 2004).

In related literature, it has been discussed that curriculum fidelity by teachers in their practice is an important concept requiring adaptation (Berman & MacLaughlin, 1976; Hord, Rutherford, Huling-Austin, & Hall, 1987); and that it is the outcome of the curriculum that needs to be protected when considering the conditions of implementation since complete fidelity may make the implementation process mechanical (Bauman, Stein, & Ireys, 1991; Boruch & Gomez, 1977). It has been highlighted that curricula are shaped in practice rather than at the desk (Varış, 1988) and by teachers and students' in-class curriculum experiences. Hewitt (2006) suggests that experiences in learning/teaching process evolve curriculum, i.e. the practitioner's curriculum (*your curriculum*). However, in countries where the implementation of curriculum is directed from a central point, the effects of the curriculum are not directly reflected onto the instructional process. The decisions of teachers on the spot are important in order for curriculum design changes to be effective for the class. Therefore, participants have to understand why a new change on the curriculum can be better (Pinar et al., 2004).

With the elementary curriculum designs that have been in practice in Turkey since the 2005-2006 academic year, the existing perceptions of teachers were challenged, in a sense, and their perceptions of curriculum were forced to change. This rearrangement of the curricular perception of teachers was created with an understanding of mechanical learning based on the positivist tradition, with assumptions from the post-positivist / interpretive paradigm such as constructivism (Koç & Demirel, 2004; Yurdakul, 2004a), and has been a rather difficult period of change. According to Pinar et al. (2004), who claim that the effect of change cannot be seen immediately but can be seen over time, schools cannot adequately renew themselves in their effort to change. Eisner (1967) defines it as offering old wine in a new bottle. Most reforms are brought in from the top, and trickled down, and very often they do not reach the classroom. However, educational change is accepted as successful when it reaches the classroom level, in

other words, when it can be adapted at the school level. Agreeing that change is a process but not an event (Fullan, 1982), it is suggested that significant school reforms should be made in a school-to-center direction continuously. Many studies show that by examining the instructional decisions and practices of teachers, it is possible to find whether the desired change can be reflected in schools through curricula in addition to the perception of teachers regarding the curricula (Biggs, 1996; Good & Brophy, 2000; Jaramillo, 1996; Sternberg & Williams, 2002; Terhart, 2003; Wilson, 1997). Moreover, the perception of teachers about curriculum is largely reflected in the instructional process and affects their decisions about instruction (Applefield, Huber, & Moaellem, 2001; Biggs, 1996; Jaramillo, 1996).

Due to several factors, there might be differences between the curriculum design and a teacher's planning in practice. Some examples of these factors are teacher characteristics, student characteristics, motivation, content, context, time, tools/materials, and resources (Kauchak & Eggen, 2012). Even accepting the difference coming from perception alone brings out the question "Whose curriculum?" and the answer to this question is "The teacher's curriculum!" (Cheung & Wong, 2002; Ertürk 1998; Flores, 2005; Hewitt, 2006; Varış, 1988). This is because no matter how perfect a curriculum is designed, it is implemented by teachers, its practitioners (Ertürk, 1998). Curriculum is more an abstract concept than a concrete one. Therefore curriculum is created by schools and it becomes concrete through the teacher's practices (Hewitt, 2006). According to Varış (1988), curriculum is in the minds and hearts of teachers. In their study, Fraser and Bosanquet (2006) state that curriculum is often perceived by teachers and students with the concepts such as units, content, student experience and the interactional process of learning and teaching. Some researchers, on the other hand, claim that the curriculum is created at school with the participation of teachers and students themselves (Cheung & Wong, 2002), preferring a flexible curriculum structure and management that includes the practices of teachers rather than explicit or written curricula that covers what is needed. In other words, that is designed theoretically in a technical and scientific way (Flores, 2005). In the study carried out by Çolakoğlu (1998) it was found that 47.5% of the teachers failed to accurately define the curriculum in scientific terms.

The suitability of the scientific meaning attributed to curriculum (Eisner, 1967), with the personal and professional meaning attributed by practitioners through their experiences, in other words, curriculum fidelity which includes adaptation, is important for the effectiveness, efficiency and functionality of the instructional process and also for the propriety of studies on curriculum development. In addition to affecting their instructional activities (Mattheoudakis, 2007; Peacock, 2001; Stipek, Givvin, Salmon, & MacGyvers, 2001), the meaning attributed to the curriculum by teachers includes important information for the development of the curriculum. According to Knight (2001), aside from the designed and developed curriculum, the perceived curriculum is also significant. He claims that teachers tend to implement neither the designed nor the developed curriculum, but the one they perceive. Therefore, the way teachers who assume responsibility in the implementation of curriculum perceive the curriculum they implement needs to be studied both in terms of the suitability of the designed and implemented curricula as well as the results and effects of the curricula. In this respect, the present study tried to answer the question "How do elementary school teachers perceive the concept of curriculum?" The following sub-questions were written in order to seek an answer to the main research question:

1. What is the perception of curriculum as presented by the curricular experiences of elementary school teachers?
2. What is the structural meaning of curricular experiences for elementary school teachers?

Method

Research Design

Since the perceptions of elementary school teachers about curriculum were analyzed in depth based on their curricular experiences in the present study, phenomenology was chosen as the research design. This is because phenomenology is a qualitative research design that deeply investigates the structure and meaning a person or group attributes to phenomena, as well as the nature and meaning of experiences relating to these phenomena (Creswell, 1998; Patton, 1990; Sarantakos, 1998).

Participants

In the study, the *typical case* and *maximum variation* (Patton, 1987) sampling methods, from the group of purposive sampling methods, were used together.

Typical case was created by choosing average state schools, while *maximum variation* was attained by using different class levels with the intention of benefiting from the different experiences of elementary school teachers with the curriculum. The reason for working with elementary school teachers is the belief that the instructional elementary curricula that were put in place during the 2005-2006 academic year may have triggered a change in the perceptions of teachers about the curriculum that had been shaped during their professional life, and to discover the contradiction or reveal the unchangeable assets in their perceptions about curriculum. The study was carried out with the voluntary participation of 26 teachers. Professional seniority of the participating teachers varied between nine and 33 years. 13 of the teachers were women, and 13 of them were men. Eight of them graduated from higher education programs other than the normal sources for elementary school teachers. The teachers had worked at their schools of employment for periods ranging between 3 and 18 years.

Instrument

The data of the study was obtained from a semi-structured interview form consisting of nine questions. For the development of the interview form, questions on perception and concept analysis in the related literature were first examined (Fraser & Bosanquet, 2006; Louridsen, 2003). In addition to this, interviews were held with elementary school teachers. Moustakas (1994) recommends the use of experience-related questions in studies of phenomenology. Accordingly, questions about the experiences of teachers were included in the interview form used in the present study. The question pool, which was prepared by using both implementation processes and the theoretical literature, was discussed and evaluated with six academicians in the field of Curriculum Development and Instruction and two academicians in Psychological Counseling and Guidance. After considering the opinions of the experts, a draft interview form was produced. The functionality of the draft form was first tried on four elementary school teachers. At the end of the practice trials, it was decided to exclude some questions, to correct some others, as well as to add some new questions to the form. The draft form consisting of 11 questions was retried in a formal interview process on five elementary school teachers working at four different schools in Torbalı and five teachers working in the Armutlu

village of Kemalpaşa in İzmir. From this, the nine-question final interview form was obtained. The final interview form was enriched with alternative questions and probes. The first question was designed to ask about personal details. Others were related to the curriculum experiences of elementary school teachers. For example, question four was "Have you had the chance to examine any curricula? If so, what features of the curriculum has attracted your attention?" and question five was "What words/concepts does the concept of curriculum make you think of? Can you list the words/concepts that first come to your mind?"

By making appointments in advance, the interviews were held in the teachers' room, school guidance unit, director's room, an empty classroom or the computer lab. No one other than the researcher and the interviewee teacher were present in the interview room. Interviews were rarely interrupted, and this was assessed as sudden and ordinary obstacles which did not influence the teacher, researcher or the interview topic. All interviews were carried out using a voice recorder to ensure the prevention of data loss. Interview lengths ranged between 28 and 50 minutes. The total time spent interviewing was approximately 15 hours.

Data Analysis

The data from the study was subjected to content analysis using an inductive approach. As there are different types of qualitative research, there are also different ways to analyze data. Qualitative data analysis is done with two approaches. In the first approach, analysis is conducted and completed simultaneously with the data collection. In the second one, on the other hand, analyses are carried out after the data is collected (Bogdan & Biklen, 1992). In the present study, the analysis of the qualitative data was done at the end of the study, after the entire data set was obtained.

The first step of the process of data analysis was the *preparation for analysis*. In this step, the related literature was researched and decisions were made on data analysis. Later, voice records were transcribed mechanically and the raw data set was obtained. The raw data set was read twice without interruption to allow the researcher to gain a sharp understanding of the data. When the researcher decided that he could command the data set, *coding* was started. Before coding, the data set was read again, this time intermittently. In this period, possible codes were tested. A list of codes

was developed considering the related literature and the possible codes in the data set were added to this list. The process of coding started by giving the meaningful data units in the data set suitable names which could coincide with the code list. A sentence was accepted as the smallest meaningful unit during the process of coding. In order to avoid ethical problems, participants were given numbers beginning with P1. A draft coding was initially done, while the number and depth of the codes could be changed during the real coding. Codes were sought for regularities among them, and patterns to be divided into groups depending on these regularities were tried to be determined. Patterns in the data set were tested using vertical and horizontal coding, as well as comparative analyses when appropriate (Figure 1). Internal homogeneity among the codes and external heterogeneity among the themes were checked and the conclusive themes and codes were attained. *Data organization* was done using a Microsoft Excel worksheet. Using this approach, it was easier to group codes at different levels, to organize the sub-codes under these groups and to reach the themes. Moreover, this system also facilitated the management of citation from the appropriate codes and themes.

In the *reporting step*, it was first decided which sub-problem of the study was to be analyzed under which category. In this respect, the research question "What is the perception of curriculum as presented by the curricular experiences of elementary school teachers?" was chosen to be analyzed under the category of *Perception of Curriculum as a Product of Experiences*, and the question "What is the structural meaning of curricular experiences for elementary school teachers?" under the category of the *Structural Meaning of Experience*. Since phenomenological reports are concluded when readers understand the fundamentals and several structures of their experiences and define the occurrence of the experience (Creswell, 1998), the research report was formed under the sections concerning experiences. Accordingly, themes that came out as a result of analysis that could exist together were defined, descriptions of the codes under these themes were made, and findings related to the themes were explained with appropriate citations. Codes that came out in the content analysis are presented in italics in the text. The criteria that were considered while choosing the direct citations used in the reporting of the findings were width, depth, plausibility, contrast and appropriateness (Yurdakul, 2004a). *Width* means that the codes were found in more than one of the

interviews, *depth* refers to the detailed explanation of the code, *plausibility* defines repeatability and frequency of the code, *contrast* explains that the code is explained in one or more interviews inconsistently with the others, and *appropriateness* is the consistency of a code with the theme and its difference from the other themes.

Validity and Reliability

Some precautions were taken for the validity and reliability of the study (LeCompte & Goetz, 1982; Miles & Huberman, 1994). For internal validity, the triangulation method was used by working with elementary school teachers from different schools and different grade levels. Direct citations were provided for plausibility. By providing other study results or examples from the related literature for the findings, evidence was sought for external validity. Reliability was tested using citations from the different participants that were included in the research report without making any comments. This made it possible to verify the findings continuously. Support was received from both teachers in the implementation processes and the related literature while developing the data collection tool. The whole qualitative data set was archived and stored so that it could be used by other researchers. In addition, concerns about external validity were taken into consideration by defining the research model, participants, development of the data collection tool, data collection, data analysis, and interpretation in detail in the method section of the study. Data analysis was done within the framework that came out of the data set and was highlighted in the related literature with the intention of increasing internal reliability. Interpretations were made in line with the conceptual framework, which helped in the consideration of external validity. Furthermore, a verification mechanism was used in testing the patterns. Feedback was obtained from both field experts and some participants for the draft research report. In qualitative research, the researcher is a part of the process, a natural participant, as well as the data collection tool in a sense (Mertens, 1998). The researcher in the present study worked at a different institution from the participants. Therefore, he interacted with the participants only within the context of the study. The researcher had no authoritative role over the participants, nor the power to make any decisions about them. It can be said that this position of the researcher helped the participants to reflect their curriculum perceptions more comfortably, as well as helped the researcher

to focus on the curriculum perceptions of the participants as independently as possible from other phenomena.

Findings

The findings were analyzed under two categories: *Perception of Curriculum as a Product of Experience* and *The Structural Meaning of Curriculum Experience*.

Category 1: Perception of Curriculum as a Product of Experience

Perception of curriculum as a product of experience is presented in two themes; *Perceived Types of Curriculum and Perception of Curriculum Defined with Metaphors*.

Perceived Types of Curriculum: The experiences of teachers with curriculum have shown that curriculum is perceived as *the theoretical text, political text, scope (content), guide books prepared by publishers* and that *the curriculum is shaped in practice*.

Curriculum as a Theoretical Text: Some teachers perceive the curriculum as a theoretical text. Curriculum as a theoretical text reflects the ideal. However, it is criticized by teachers for its compatibility with reality and its inability to continuously adapt with change:

“Creating a certain human type. Written on paper, we can find words on a good person, a modern person, contemplation, producing, helping, and sharing; words expressing human values within the curriculum. However, to what extent are they put into practice? Actually, I have concerns about this.” [P-2]

“Theoretical. Those who prepared it, I think, included information on the human type they want to create rather than people’s needs. A curriculum should be something divine. Because a curriculum should include everything that a child as a person will need. This should not be a static curriculum of a collection of pages, but one that can change continuously, change daily if needed, not constant but changeable.” [P-3]

As seen here, it is expressed that as far as theoretical texts go, curricula will be further from reality and the conditions of implementation. In the expressions which stated that curricula should meet requirements, references were also made to the dynamic structure of curricula, albeit theoretical,

and it was mentioned that they should not remain as a collection of theoretical pages.

Curriculum as a Political Text: The fact that curriculum is political is an issue that was particularly highlighted by the participating teachers of the study:

“A country has objectives. A national education policy. Everything is developed in this direction. [However] the curriculum changes depending on those who have the executive power. This is why we cannot get good results. This is one of the unique reasons why teachers have problems after being hired. For example, the implementation when you (the interviewer) received education is different from the one in the period when I started teaching. It is as if you are teaching in a different country... In our country, the curriculum is arranged according to periodic needs. According to the type of human required by the periodic needs, the curriculum is arranged in this direction. Curricula are amended in accordance with the human type that is required by those in power...” [P-7]

“Shortly, I see the curriculum as tools, the equipment, methods and techniques of creating a certain type of human politically.” [P-3]

“Those who have the production tools in their hands, everything in the whole country are arranged accordingly. Who is in parliament today? The representatives of those who hold the production tools in their hands... That is education-instruction is an institution of superstructure. This means educational affairs at the top are shaped according to the way relations of production are shaped. We cannot claim that curricula do not have a political side.” [P-12]

According to P-7, curricula are developed in accordance with the kind of people needed by the administrators of the country. P-3, on the other hand, thinks that the curriculum is a political tool for raising humans. P-12 sees the curriculum as a text which is shaped by those who have the production tools in their hands.

Curriculum as the Scope (Content): It was found that content underlies the perceptions of some teachers about curriculum. *According to the teachers, a curriculum defines the order of presentation of subjects in addition to the list of subjects*. P-1’s opinions on this issue are noteworthy:

“We [teachers] already have a elementary school curriculum. Our curriculum arrives to us and Ankara [Ministry of National Education] says:

"You will teach this and that subject in the Turkish Language... Family and environment in social studies lessons, these subjects have an order. Because you have to teach fundamental subjects, you will be called to account for this. They ask you 'Have you taught these, or not?'" [P-1]

Curriculum as guidebooks prepared by publishers: Findings have shown that teacher guidebooks sent to schools upon the 2005 curriculum amendment were also perceived as the curriculum by teachers. P-11 and P-17 showed that they perceived the guidebooks as the curriculum with their following expressions:

"Actually what I call curriculum has been integrated with books with the new curriculum [2005]. That is, now guidebooks are sent to us, which show us the activities, dates, and objectives to be followed in a year." [P-11]

"We use guidebooks. The curriculum is the guidebook. In fact, it is not called a curriculum, but the books contain useful things for us. We are committed to using the guidebooks." [P-17]

It was also found that the main factor that causes some teachers to perceive the curriculum as *source books* and publishers' books as supplementary is the fact that the official curriculum is not sent to teachers as a written document. In addition, for some teachers, guidebooks have mechanized teachers and restrained them from preparations. P-4 expressed expectations and criticism on this as follows:

"I wish the curriculum was given to me in writing or it was close at hand in detail; I'd like to have the curriculum close at hand so that I could use it whenever I need it. I make use of the curriculum via the guidebook. Moreover, I don't have a document for a curriculum... There are times when the teacher opens guidebooks in class. I mean, I think it prevents preparation. I have a source here, thinks the teacher... There is no detailed study for the lesson beforehand. It has made the teacher used to the curriculum being in their laps. It has kind of made the teacher lazy." [P-4]

Curriculum Shaped in Practice: Findings have also shown that curricula should be designed from the ground up, not from the top down. *Disciplinary structure, instructional processes, student characteristics, characteristics of the school environment, family and cultural structure, teacher competencies and infrastructure opportunities* have been determined as the reasons that make it necessary to consider the context when developing curricula. A group of teacher opinions expressing these reasons are presented below:

"Rather than the centralized system, regional and local education units should be established. The questions "What kind of people lives in that region? Is it a region of immigration? What is the culture like? What are their economic levels? What is the family structure like? What is their approach to education?" should be studied. Later, what are the prioritized needs of the children or families? These should be determined and implementations that can correct these problems should be included in the curriculum. Also, resources are very important. Resources of tourism, underground resources or aboveground resources... that is, region specific characteristics that make the place a region should be included in the curriculum as well. Topics that will be useful for the child or the family living in that region should be integrated. I mean, I think it leads to a holistic development." [P-8]

"To me, curriculum should be regional. That is, curriculum should not be central [all around the country]. Because it is not possible for a curriculum that comes from Ankara to apply to both İzmir and Kars. The environment is different, economic structures are different, student profiles, family profiles are all different. It seems to me that it would be a very radical change, but there should be local mechanisms of education. A curriculum should be designed and implemented in accordance with the geographical structure, student profiles, and resources of each region." [P-10]

"The curriculum should be suitable for the structure of geography, students and region of implementation. I mean, five people sitting at the table with intentions for a curriculum and deciding on a curriculum for Turkey, sending it to Van and to, say, İzmir also is not a curriculum. This is beating the air." [P-1]

The teachers whose opinions are presented here claimed that curricula should be developed in a school-centered way, based on analyses of scientific requirement. In addition, emphasizing the functional aspect of the curriculum, P-8 thinks that development can be achieved starting with the child and family if curricula are developed in a school-centered approach. P-1 pointed out the fact that the curricula, particularly those developed centrally, cannot be applicable. Moreover, P-2 explained that the curriculum is shaped under practice with the statements: "What is curriculum? It is everything we do, or anything we cannot do when we go into the class." Making the following statements;

“If I were to develop a curriculum, I would try to make it practical first. Also, I would design a curriculum that came from them [the teachers], I mean not the national educational curriculum with unknown sources, but a curriculum which would come from the teachers, one that is integrated with experience, covering what was implemented. In my opinion, we can use it [the curriculum] more if we adapt it to ourselves, add something from us.” [P-7]

P-7 highlighted that the curricula should be nurtured particularly by implementation processes; that they could be useful curricula only if they are integrated with teacher practices and designed from the ground up.

Perception of Curriculum as Defined with Metaphors:

It was observed that the metaphors teachers used revealed their perceptions of both the *existing curriculum* and the *required* one. The *required curriculum* included features like guiding /decreasing fallibility (Atatürk / leader / guide / leaflet), showing how the curriculum variables could be brought together (Rubik’s cube), productive, original and creative (*palm tree*), allowing for the use of desired variables in the direction of a certain objective (*canvas*), constantly changing, can be shaped according to its environment (chameleon), alive (*living / ocean / sea*). Perception of the *existing curriculum*, on the other hand was expressed with metaphors like one that is not sure to exist but is believed to (*ghost*), having features that are prepared and checked in the center (*hand fan*), Full of weeds and mistakes (*neglected garden*), one about which very little is known and only known by the developers (*robot*), multi-armed and that needs to reach many points (octopus). Table 1 shows the metaphors and their meanings reflecting teachers’ perceptions of curriculum:

Some citations defining the *existing curriculum* among the mentioned metaphors are as follows:

“What is the primary source of a man of God, it is the Holy Book. The curriculum is our holy source. We have a look at it when we fall into dilemmas. Well, Holy Books cannot be changed, but curricula are changed according to the needs of the country and the requirements of the age. It means when teacher has implementation-related hesitations, the primary source is the curriculum.” [P-12]

“I think it is like a rough construction, because you are the ones who fill it in. It is the teacher who will raise it, add more stories, even design

the rooms. Family, society and some value judgments and belief will be on the walls of the construction...” [P-18]

“Evliya Çelebi, a wise man .When I take the curriculum in my hand, I want it to tell me everything. It should guide like Evliya Çelebi, be put through a certain scheme and examination. It should tell me how I should approach a particular student, how I should approach in general, create groups, it should give me. I mean, it (the curriculum) should know, recognize and give me information like Evliya Çelebi.” [P-10]

Table 1
Metaphors Reflecting Teachers’ Perceptions of Curriculum and their Meanings

Metaphor	Meaning
<i>Existing curriculum</i>	
Ghost	One that is not sure to exist but is believed to.
Hand fan	Having features that are prepared and checked in the center.
Neglected Garden	Full of weed /with mistakes.
Robot	One about which very little is known.
Octopus	Multi-armed / That needs to reach many points.
Connection	Connecting/ Making similar practices to each other.
Evliya Çelebi (Wiseman)	Informing, explaining in detail.
Holy Book	Main resource.
Gloves	Proceeding step by step.
Chain	Restricting teacher’s movement.
<i>Required curriculum</i>	
Atatürk / Leader / Guide / Leaflet	Guiding /Decreasing fallibility.
Rubik’s cube	Showing how the curriculum variables could be brought together.
Palm Tree	Productive/ creative.
Canvas	Allowing for the use of desired variables .
Chameleon	Constantly changing, can be shaped according to its environment.
Living / Ocean / Sea	Alive.
Sun	Illuminating darkness.
Garden	Yielding products when cared.
Frame	Finite limits, but allowing for the desired work to be carried out
Rough Construction	Supporting teacher autonomy.
Frog	Metamorphosed by the teacher.
Tailor	Recreating what matches the student.

“I would compare it to a garden. There are various herbs in it. I would compare it to a garden which also has weeds in it. Those who will clean out the weeds are academicians.” [P-4]

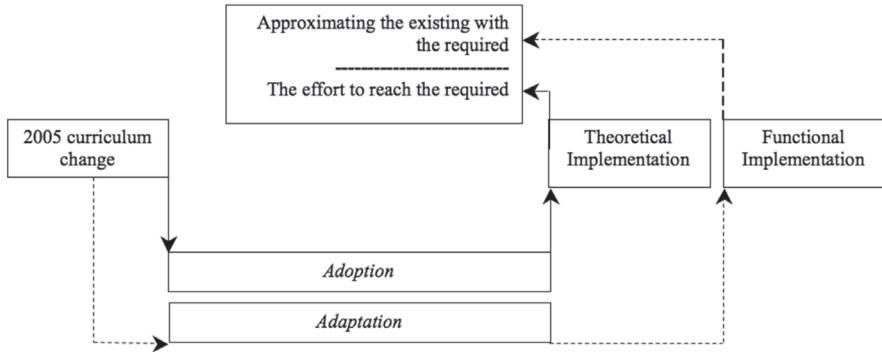


Figure 1: The main structure creating curriculum fidelity.

“I can compare it to an octopus, multi-armed; I mean the curriculum has many arms. It is something with many arms that should reach many points.” [P-9]

“I would compare it to a ghost that we do not believe to exist, yet we mention its existence in small places, stories, fairy-tales and films. Whether it exists or not, we don’t know.” [P-2]

Some citations defining the *required curriculum* among the mentioned metaphors are as follows:

“I can say instructive, guide, Atatürk. As it shows me the way. Chief, in terms of instructing, informing. Leadership, it tells you what you have to do.” [P-25]

“Rubik’s cube. You turn it, you get the blues not the reds, you get the yellows, not the greens, you try. It actually has a technique, very simple. You solve it when you find the technique. To solve the Rubik’s cube, one side should be in the same color. In terms of curriculum [also] it is making all the parts suitable. A teacher can do anything. A teacher is everything. Say, there is nothing in this class, a teacher tries to put the cubes together.”[P-1]

“I think of a palm tree because of its productiveness. I mean, it is productive, a producing, creative concept.” [P-3]

“I am given a canvas, paint; but I should not go beyond those limits. I need to be allowed to add any color I want to the picture. The rest should be left to me. Let me add what I need to add.” [P-5]

“I would compare it to the chameleon. Because it changes constantly. It should match the conditions of the day, the environment.” [P-7]

In Table 1, it can be seen that the existing curricular perception of teachers is directed from the center in

the octopus and hand fan metaphors; that curricular implementations are guided in the metaphors of Evliya Çelebi, holy book, connection and stairs; and that teachers do not have enough information about the curriculum in practice in the metaphors of ghost and robot. Moreover, among the metaphors used by teachers to reflect their perceptions of curriculum, Evliya Çelebi and holy book are positive while the other metaphors in this group are negative. In addition, the metaphors of Atatürk/ leader/guide and sun-reflecting perceptions of the required curriculum show that the curriculum is perceived as a guide. The metaphors Rubik’s cube, palm tree, canvas, chameleon, frame, garden, rough construction, alive/ocean/sea, and frog reveal that the curriculum is perceived in an adaptable structure. The high number of the metaphors that were used to show that curriculum can be shaped in practice is noticeable in terms of teacher autonomy in curricular implementations. In other words, the required curriculum according to teachers should have functional, applicable and flexible features.

Category 2: The Structural Meaning of Curriculum Experience

The structural meaning of curriculum experience was dealt with under the themes *The Main Structure Creating Curriculum Fidelity and Characteristics of Teachers Adapting the Curriculum*.

The Main Structure Creating Curriculum Fidelity:

The horizontal and vertical relations among the codes revealed a basic pattern forming the perceptions of curriculum of the teachers. This pattern showed that curriculum fidelity is in the *adaptation* and *adoption* approaches in practice, which is consistent with the literature (Pinar et al., 2004). It was found that teachers who choose adoption of the curriculum

tend to implement the curriculum as it is and they explained that this was *necessary*; those choosing adaptation, on the other hand, accept the curriculum as a *guide* and show autonomous behavior as a teacher due to their experience or context-centered variables. As a matter of fact, one of the participants, P-25, also mentioned the functional aspect of the curriculum in their statements expressing how they adapt the curriculum:

“The curriculum is general. You take what you want from it. With my knowledge, skills, I go beyond the curriculum and no one has ever questioned me. It is the teacher who brings the curriculum to life... I take what I need from the curriculum, read and try to understand it. I can't say I implement it as it is. Actually the curriculum does not necessarily restrict you in implementation... In fact, this is what I have always done. I have necessarily not committed myself to the idea that the curriculum wants something...” [P-25]

According to P-25, however curricula are developed and teachers, the implementers of them, should first read and try to understand the curriculum. Teachers, once having this understanding, adapt the curriculum to the context by comprehending the main philosophy and considering several variables of the curriculum. The following statements made by P-12 and P-2 supported this comment as well:

“We adapt the curriculum for ourselves. We add details to it, change it according to the class level, socio-cultural conditions of students and their academic achievement. We need to have a look [at the curricula] in order to determine the main framework... In order for a holistic curriculum to be created...” [P-12]

“Not every school is the same or equal in our country. I mean, you can't implement one curriculum from Southeast Anatolia in the Black sea region, and use it in the Mediterranean region in the same way. In my first years in the profession I taught multi-grade classes in village schools. We used to employ the curriculum by flexing it a little. But we can use the curriculum in a more different way, a little better fit for the purpose. We can arrange studies accordingly.” [P-2]

Seeing adaptation necessary, P-23 mentioned some variables spectacularly using metaphors as well:

“The curriculum is a draft scheme, I mean for me. I compare it [the curriculum] to frogs. We metamorphose it. Actually we should metamorphose it. The curriculum we implement

here and one implemented in another region should not be the same. The curriculum right now is not very similar to a frog, we can't metamorphose it. In fact it should be metamorphosed so that it can change according to the city, town, the location of the school, classes or the group created.” [P-23]

As can be seen, teachers express that they see adaptation as necessary due to reasons such as school differences, school and classroom conditions, teacher or student characteristics, and socio-cultural conditions. This suggests that situational variables affect teachers by them taking an adaptive approach. The findings also show that adaptation provides autonomous behavior while an implementation that is completely independent of the curriculum would be out of question.

It was found that the main factor revealing the behavior of teachers who assumed an *adopting* approach was *obligation*. Teachers perceive displaying appropriate behavior with the developed curricula as *obligations*. Moreover, this was considered to show that the guiding property of the curriculum for teachers is neglected.

The opinions of a group of teachers adopting this approach are as follows:

“We have to benefit from the curriculum. There are so many subjects, so many things to be taught. When you are deep in a subject, if you do not stop where you need to, then you cannot keep up with the curriculum. Therefore, we have to act accordingly.” [P-24]

“It [the curriculum] is not a source we choose to benefit from. We have to teach the curriculum, our studies should be within the framework of a curriculum. I mean, we have to benefit from the curriculum. We cannot go away from it. Every teacher would teach in his or her own personal way then. It should be like this.” [P-5]

The findings show that while some teachers implement the curriculum as it is with the understanding of “This is what it should be!”, some others implement the requirements by adapting it appropriately within the context of considering variables like school, students and environment. Since the statements of teachers were made using the framework of the 2005 elementary school educational curricula, it was also found that the main effect, which provided the expression of curriculum perception, was the experiences of teachers created by this change. Looking at the regularities among the findings, it was seen that curriculum fidelity

of teachers was developed within the cycle of *i) perception of the existing curriculum- change - adoption of curriculum - theoretical implementation and ii) perception of the existing curriculum - change - adaptation of change - functional implementation.* This cycle is explained in Figure 1:

Characteristics of Teachers Adapting the Curriculum: Considering that fidelity needs to include adaptation as well (Berman & MacLaughlin, 1976; Hord et al., 1987), complete fidelity is not acceptable as very appropriate since it mechanizes the implementation processes of the curriculum. Instead, the outcome of curricula should be adhered to particularly while implementing the curriculum (Bauman et al., 1991; Boruch & Gomez, 1977). The answer to the question “What are the characteristics of the adaptive teacher?” has gained importance. The significant data units in the data set revealed the characteristics that teachers should have as the adapters of the curriculum as well. These are summarized in Table 2.

Table 2
Characteristics of Teachers Adapting the Curriculum

Analyze and investigate the curriculum	Think reflectively
Adapt curriculum for the class	Do follow-up assessments
Notice process variables	Be a decision maker
Comprehend curriculum	Be able to enrich curriculum
Know characteristics of individuals	Act professionally
Redesign / produce curriculum	Be self-confident
Be situational	Act scientifically
Assume responsibility	Relate curriculum elements
Be prepared / make plans	Renew himself / herself
Have research skills	Use information and communication technologies efficiently

In Table 2 it is remarkable that the characteristics of teachers who adapt the curriculum are related with professional knowledge rather than the field knowledge of teaching. Mentioning the characteristics of adaptive teachers, P-1 and P-9 summarized Table 2 in a way:

“Teachers should analyze the curriculum, should adapt it to the class very well. They should feel the pulse of their class and students very well. Not everything may be directly suitable for you or your students. I mean, the thing there [in the curriculum] is somehow dependent on the teacher’s skills, orientation. The teacher should do a very good adaptation there. Teacher quality

is very important. Even if you are given the best curriculum in the world, it doesn’t work if the teacher can’t comprehend its orientation, can’t integrate the students with the curriculum. The teacher should know how to read the curriculum very well and understand it very well.” [P-1]

“I mean, you have some clothes, the curriculum, tailored a certain way. You have to put it on all of them, the students, and it doesn’t fit everyone. It is too big for one, too small for another, and too narrow for another. It is too loose for still another student. The teacher is the tailor. He/she should make the clothes fit on each student in a way that matches them, so they can wear it smartly... the curriculum should improve the teacher. Teachers should also research. They should not be told to do this and that like a robot...It makes us rusty. Then you come unprepared, without any research. The fact that teachers aren’t improved is also bad. If a teacher is not a researcher he/she also reflects it on the child. Therefore, we shouldn’t be molded...” [P-9]

As seen here, P-1’s opinions are framed over the idea that even the best curriculum of the world does not work unless the teacher is competent. P-9, on the other hand, defined the adaptive teacher with a metaphor. According to him/her, an adaptive teacher is like a tailor and has to adjust to match the student. P-18, addressing a curriculum shaped under practice says:

“It [The curriculum] should be functional, open to the day’s conditions and renewal... our main objective is, of course, to raise [individuals] for our country...[To this end] the teacher also renews himself/ herself and improve himself/ herself by understanding the curriculum.” [P-18]

P-18 mentioned that teachers adapt the curriculum without diverging from the main objectives of the country, but that the primary condition for this is to understand the curriculum. To understand it, teachers have to improve themselves. P-4 suggested that teachers have to understand the curriculum and they should be sufficiently introduced to what the curriculum is in order to understand it:

“No matter which curriculum you give to a person who has not internalized a curriculum, it doesn’t matter. First, the teacher should comprehend the curriculum. Not to defend or reject the correctness or wrongness of [this] curriculum. I am a professional implementer. Maybe it has some aspects that are not correct for me. I can criticize these with reports or by

adding something different, state my opinions at the end of the year. But... what curricula really are cannot be delivered by teachers. I don't think teachers comprehend any curricula completely. If they do not understand the should, the way they use it will be their own way." [P-4]

As can be seen, the teacher in assuming the adaptive approach should first understand the curriculum, operate the feedback mechanism with the information he/she obtains during implementation processes, and contribute to the development of the curriculum. Otherwise, according to P-4, the curriculum will be limited to the ways known by the teacher.

Discussion

The results of the study show that the perceptions of elementary school teachers about curriculum can be analyzed under two main categories: the product of the experiences of the teacher and the structural meaning of curricular experience. Perceptions of curriculum were examined under different categories in similar studies from the literature as well (Özdemir, 2012; Schubert, 1986; Wahyudi, 2007). In order to reach consistent results, this makes it necessary to define and give dimensions to the perceptions of teachers about the curriculum as a psychological structure through scale developmental studies.

The curriculum, which is perceived as the product of different curricular experiences in the literature, is examined in terms of various aspects such as political, racial, historical, phenomenological, disciplinary structure, as well as social and cultural reflection (Hewitt, 2006; Pinar et al., 2004). When accepted as the set of shared common experiences, a curriculum is firstly a concept. When a curriculum is planned and implemented within a context, it becomes a distinct curriculum. Additionally, the personal experiences of teachers with the curriculum during the learning/instruction process make the curriculum "your" curriculum (Hewitt, 2006). Cheung and Wong (2002) state that curriculum is created with the participation of the teacher and students. In addition, Hewitt (2006) suggests a teacher's knowledge, course books, videos, experiments and field trips make up the living curriculum. The results of the present study have revealed that the curriculum is the theoretical text, political text, scope (content), and publisher-designed guidebooks, and it is shaped with practice. Moreover, the perceptions of teachers about curriculum became concrete with the metaphors they used. Curriculum as a theoretical text reflects

the ideals, but it is criticized by teachers for its incompatibility with reality and failure to adapt continuously with changes. Teachers think that curriculum should have a dynamic structure even though it is theoretical. Some teachers perceive curriculum as the political text, as a political tool of the directors or those who have the power and tools of production in their hands. This perception coincides with Apple's (1988) curriculum, social production of clashing powers, and Gramsci's explanation of a tool used by the dominating ideology to shape people in the way it wants and to sustain its own status quo (Hardee, 2010). In addition to the list of subjects, teachers perceive the order of subjects to be taught as curriculum. This finding is similar to the results obtained in the study carried out by Fraser and Bosanquet (2006). Although the concept of syllabus, which means a list of subjects, was replaced with curriculum in Turkey in 1950 (Demirel, 2003), it can be noticed that teachers still perceive content, a tool in attaining objectives, as curriculum. Hewitt (2006) sees the published course books as a production of supplementary materials to be used in class for a particular curriculum as the traditional way of curriculum development. The 2005 elementary school curricula have contributed to the fact that guidebooks prepared by publishers are perceived as curriculum in the present study. The main factor to cause this perception is that the official curriculum is not handed to teachers in a written document but that curricular implementations are carried out through the use of guidebooks instead.

The perception that curriculum is shaped under practice was created by such situational factors as disciplinary structure, instructional processes, student characteristics, features of the school environment, family and cultural structures, teacher competencies, and infrastructural opportunities. Opinions about the curriculum is shaped under practice in the related literature (Cheung & Wong, 2002; Ennis & Chen, 1995; Hewitt, 2006) support this finding and to some extent act as an answer as to why curricula should be adapted.

Moreover, the elementary school teachers that participated in the study made their perceptions of curriculum concrete by using metaphors. It is known that participants have revealed different features of curriculum by using metaphors in similar studies carried out in Turkey (Aykaç & Çelik, 2011; Gültekin, 2013; Özdemir, 2012; Taşdemir & Taşdemir, 2011a, 2011b). Similarly, with the metaphors they used, elementary school

teachers in this study perceived curriculum in two categories: the existing curriculum and the required curriculum. It was determined that the metaphors of ghost, hand fan, neglected garden, connection, Evliya Çelebi, Holy Book, stairs, chain, and octopus reflected the perceptions teachers about the existing curriculum, and that the metaphors Evliya Çelebi and Holy Book are positive in terms of directing implementations whereas the other metaphors in the group are negative. In addition, these are the metaphors teachers used while criticizing the existing curricula. The metaphor of hand fan in particular defined a negative perception of curriculum in the meaning that consists of necessary and unnecessary information in the study of Gültekin (2013) as well. Likewise, hand fan was used by teachers in the present study to mean one that prevents teacher autonomy in the implementation and shaping of the curriculum in practice due to the terms of the central administration. Moreover, most of the metaphors reflecting the perceptions of teachers about curriculum define the required curriculum. This finding is parallel with the findings of Özdemir's (2012) study which indicated the positive perceptions of teacher candidates regarding curriculum.

The findings of the present study showed that teachers maintain curriculum fidelity in their own instructional processes by using the approaches of adaption or adoption of the curriculum. This is parallel with the literature (Bauman et al., 1991; Berman & MacLaughlin, 1976; Boruch & Gomez, 1977; Hewitt, 2006; Hord et al., 1987; Pinar et al., 2004). The findings revealed that teachers who take on adoption tend to implement the curriculum from a sense of obligation, whereas those who assume adaptation accept the curriculum as a guide and see adaptation as necessary due to experienced or context-based reasons like school and class conditions, teacher or student characteristics, or socio-cultural conditions. Discussing how the curriculum is included in the lesson plan, Hewitt (2006) compares this to orchestrating a piece of music in different ways while keeping faithful to its original version.

Since perceptions of curriculum based on teacher experiences developed around the elementary school curricula that were put into practice in the 2005-2006 academic year, it was found that this change was the main effect which helped the expression of curricular perception. With the paradigm shifts in particular, there have been changes in different theories and approaches concerning human learning. Parallel with these changes, there has

been a shift from behaviorism to cognitivism and from cognitivism to constructivism in education as well (Applefield et al., 2001). Koç and Demirel (2004) explain this change philosophically as an epistemological point of view, which emphasizes constructing information instead of transferring and recording information transferred by others. Yurdakul (2004b), on the other hand, mentions changes in individuals' existing information, reality and learning perception in the shift from behaviorism to constructivism. The constructive learning approach, which can be accepted as the reflection of the interpretive paradigm on curricula (Yaşar, 2013), constituted the starting point of the elementary curricula which were put into practice in the 2005-2006 academic year in Turkey. Akpınar and Aydın (2007) state that teachers are not very committed to a behaviorist approach in curricular implementations; they find the changes in education positive and are open to change and innovations. In this respect, these curricular changes can be considered supportive of the characteristics of adaptive teachers. This is in compliance with the findings of the study conducted by Flores (2005), which showed teachers supported flexible management. Therefore, changes with curriculum can be influential on the perceptions of teachers about curriculum, and these perceptions can direct their instructional processes. The results of the study showed that the main structure creating curriculum fidelity developed within the cycle of (i) perception of the existing curriculum – change – adoption of curriculum – theoretical implementation and (ii) perception of the existing curriculum – change – adaptation of change – functional implementation. Considering the findings of Schiro (1992), by examining the perceptions of teachers about curriculum every four or five years, information can be obtained for curricular development studies. Curricular development is defined as a systematic research process that develops under practice (Ertürk, 1998; Varış, 1988). Based on this, it could be asserted that curricula are developed in a continuous net of communication from the center to schools and from schools to the center (Varış, 1988), and that the curricula coming out of an experimental product of this process (Ertürk, 1998) can allow for adaptation on that condition only.

The present study also found the characteristics of teachers who take on the approach of adapting the curriculum during the instructional process. Whether teachers that will make adaptations in their practice have the required characteristics or not is a problem of importance. An unqualified

implementation may cause divergence from the characteristics which are sought for development in people (Ertürk, 1998). When adaptation moves away from being scientific and performed before the required characteristics of a teacher are matured, it can sometimes be more dangerous than the adoption approach. It can transform educational practices into personal implementations. As a result of this study, it was found that the most basic characteristic of an adaptive teacher is to understand /adapt the main philosophy of the curriculum. This finding

is consistent with the explanations in the related literature (Barsalov & Goldstone, 1998; Gelen & Beyazıt, 2007; Gömleksiz, 2007; Kelly, 1999; Pinar et al., 2004; Shunk, 2009). Therefore, teachers that can adapt the curriculum should be competent in understanding the curriculum, questioning the context, and paralleling the curriculum with the context. In this respect, it can be recommended that the competence of teacher education programs for educating adaptive teachers and the fidelity levels of teachers to the curriculum should be studied.

References

- Akpınar, B., & Aydın, K. (2007). Eğitimde değişim ve öğretmenlerin değişim algıları. *Eğitim ve Bilim*, 32(144), 71-80.
- Apple, M. W. (1988). *Teachers and texts: A Political economy of class and gender relations in education*. NY: Routledge.
- Applefield, J. M., Huber, R., & Moaellem, M. (2001). Constructivism in theory and practice: Toward a better understanding. *The High School Journal*, 84(2), 33-53.
- Aykaç, N., & Çelik, Ö. (2011, October). *Öğretmenlerin ve öğretmen adaylarının eğitim programına ilişkin metaforik algılarının karşılaştırılması*. Paper presented at First International Congress on Curriculum and Instruction, Anadolu University, Eskişehir, Turkey.
- Barsalov, L. W., & Goldstone, R. L. (1998). Reuniting perception and conception. *Cognition*, 65, 231-262. doi: 10.1016/S0010-0277(97)00047-4.
- Bauman, L. J., Stein, R. E., K., & Ireys, H. T. (1991). Reinventing fidelity: The transfer of social technology among settings. *American Journal of Community Psychology*, 19(4), 619-639. doi: 10.1007/BF00937995.
- Berman, P., & McLaughlin, M. W. (1976). Implementation of educational innovation. *The Educational Forum*, 40, 345-370.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32, 347-364. doi: 10.1007/BF00138871.
- Bobbitt, J. F. (1918). *The curriculum*. Boston: Houghton Mifflin.
- Bogdan, R. C., & Biklen, S. K. (1992). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Boruch, R. F., & Gomez, H., (1977). Sensitivity, bias, and theory in impact evaluation. *Professional Psychology*, 8(4), 411-434. doi:10.1037/0735-7028.8.4.411.
- Breault, D. A., & Marshall, J. D. (2010). Curriculum, definitions of. In C. Kridel (Ed.), *Encyclopedia of curriculum studies* (pp. 179-181). CA: Sage.
- Brewer, J. A. (2007). *Introduction to early childhood education*. Boston: Pearson.
- Byrnes, J. P. (2001). *Cognitive development and learning in instructional contexts* (2nd ed.). Boston: Allyn & Bacon.
- Cheung, D., & Wong, H-W. (2002). Measuring teacher beliefs about alternative curriculum designs. *The Curriculum Journal*, 13(2), 225-248. doi: 10.1080/09585170210136868.
- Çolakoğlu, G. (1998). *İlköğretim I. kademe öğretmenlerinin mevcut program tasarımları hakkındaki görüş ve önerileri (Balıkesir ili örneği)* (Master's thesis, Balıkesir University, Balıkesir, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Demirel, Ö. (2003). *Kuramdan uygulamaya eğitimde program geliştirme* (5th ed.). Ankara: Pegem-A Yayıncılık.
- Dewey, J. (1916). *Democracy and education*. NY: Macmillan.
- Dewey, J. (1938). *Experience and education*. NY: Macmillan.
- Eisner, W. E. (1967). Franklin Bobbitt and the "science" of curriculum making. *The School Review* (Seventy-fifth Anniversary Issue), 75(1), 29-47.
- Ennis, C. D., & Chen, A. (1995). Teachers' value orientations in urban and rural school settings. *Research Quarterly for Exercise and Sport*, 66(1), 41-50. doi: 10.1080/02701367.1995.10607654
- Ertürk, S. (1998). *Eğitimde program geliştirme* (10th. ed.). Ankara: Meteksan A.Ş.
- Flinders, D. J., & Thornton, S. J. (1997). *The curriculum studies reader*. NY: Routledge.
- Flores, M. A. (2005). Teachers' views on recent curriculum changes: tensions and challenges. *Curriculum Journal*, 16(3), 401-413. doi: 10.1080/09585170500256479.
- Fraser, S. P., & Bosanquet, A. M. (2006). The curriculum? That's just a unit outline, isn't it? *Studies in Higher Education*, 31(3), 269-284. doi: 10.1080/0307570600680521.
- Fullan, M. (1982). *The meaning of educational change*. NY: Teachers College Press.
- Gelen, İ., & Beyazıt, N. (2007). Eski ve yeni ilköğretim programları ile ilgili çeşitli görüşlerin karşılaştırılması. *Kuram ve Uygulamada Eğitim Yönetimi*, 51, 457-476.
- Gömleksiz, M. N. (2007). Yeni ilköğretim programına ilişkin öğretmen görüşlerinin çeşitli değişkenler açısından değerlendirilmesi. *Eğitim Araştırmaları*, 27, 69-82.
- Good, T. L., & Brophy, J. E. (2000). *Educational psychology: A realistic approach* (4th ed.). NY: Longman.
- Gültekin, M. (2013). İlköğretim öğretmen adaylarının eğitim programı kavramına yükledikleri metaforlar. *Eğitim ve Bilim*, 38(169), 126-141.
- Hardee, S. C. (2010). Gramscian thought. In C. Kridel (Ed.), *Encyclopedia of curriculum studies* (pp. 416-417). CA: Sage.

- Henson, K.T. (2003). *Curriculum planning* (2nd ed.). IL: Waveland Press.
- Hewitt, T. W. (2006). *Understanding and shaping curriculum: What we teach and why?* Thousand Oaks, CA: Sage.
- Hord, S. M., Rutherford, W. L., Huling-Austin, L., & Hall, G. E. (1987). *Taking charge or change*. Alexandria, Virginia: Association for Supervision and Curriculum Development.
- Jaramillo, J. A. (1996). Vygotsky's sociocultural theory and contributions to the development of constructivist curricula. *Education*, 117, 133-140.
- Kauchak, D., & Eggen, P. (2012). *Learning and teaching: Research-based methods*. Boston: Pearson.
- Kelly, A. V. (1999). *The curriculum: Theory and practice* (4th ed.). London: Paul Chapman Publishing.
- Knight, P. H. (2001). Complexity and curriculum: A process approach to curriculum-making. *Teaching in Higher Education*, 6(3), 369-381. doi: 10.1080/13562510120061223.
- Koç, G., & Demirel, M. (2004). Davranışçılıktan yapılandırmacılığa: Eğitimde yeni bir paradigma. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 27, 174-180.
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52, 31-60. doi: 10.3102/00346543052001031.
- Louridsen, D. A. (2003). *What are teachers' perceptions of the curriculum development process?* (Doctoral Dissertation, Ohio State University) Retrieved from <https://etd.ohiolink.edu>
- Marsh, J. C., & Willis, G. (2007). *Curriculum: Alternative approaches, ongoing issues* (4th ed.). NJ: Prentice Hall.
- Mattheoudakis, M. (2007). Tracking changes in pre-service EFL teacher beliefs in Greece: A longitudinal study. *Teaching and Teacher Education*, 23(8), 1272-1288. doi: 10.1016/j.tate.2006.06.001.
- Mertens, D. (1998). *Research methods in education and psychology*. London: Sage.
- Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Ornstein, A., & Hankins, F. H. (1988). *Curriculum foundations, principles and issues*. NJ: Prentice Hall, Englewood Cliffs.
- Özdemir, S. M. (2012). Eğitim programı kavramına ilişkin öğretmen adaylarının metaforik algıları. *Kuramsal Eğitim Bilimleri Dergisi*, 5(3), 369-393.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluations*. Newbury Park, CA: Sage.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Peacock, M. (2001). Pre-service teachers' beliefs about second language learning: A longitudinal study. *System*, 29, 177-195.
- Pinar, W., Reynolds, W. M., Slattery, P., & Taubman, P. M. (2004). *Understanding curriculum*. NY: Peter Lang Publishing.
- Sarantakos, S. (1998). *Social research* (2nd ed.). Basingstoke, Hants, United Kingdom: MacMillan Press.
- Saylor, J., Alexander, W., & Lewis, A. (1981). *Curriculum planning for better teaching and learning* (4th ed.) New York: Holt, Rinehart & Winston.
- Schiro, M. (1992). Educators' perceptions of the changes in their curriculum belief systems over time. *Journal of Curriculum and Supervision*, 7(3), 250-286.
- Schubert, W. (1986). *Curriculum: Perspective, paradigm, and possibility*. NY: Macmillan.
- Shunk, D. H. (2009). *Öğrenme teorileri: Eğitimsel bir bakış* (Trans. M. Şahin). Ankara: Nobel Yayın- Dağıtım.
- Squires, D. A. (2008). *Curriculum alignment, research based strategies for increasing student achievement*. Thousand Oaks, CA: Corwin Press.
- Sternberg, R. J., & Williams, W. M. (2002). *Educational psychology*. Boston: Allyn & Bacon.
- Stipek, D. J., Givvin, K. B., Salmon, J. M., & MacGyvers, V. L. (2001). Teachers' beliefs and practices related to mathematics instruction. *Teaching and Teacher Education*, 17, 213-226. doi: 10.1016/S0742-051X(00)00052-4.
- Taşdemir, A., & Taşdemir, M. (2011a, April). Metaphors on teaching process and teachers; produced by the teachers. In Z. Kaya & U. Demiray (Eds.), *2nd International Conference on New Trends in Education and their Implications* (pp. 785-794). Antalya, Turkey: Siyasal Kitabevi.
- Taşdemir, M., & Taşdemir, A. (2011b, April). Teachers' metaphors on K-8 curriculum in Turkey. In Z. Kaya & U. Demiray (Eds.), *2nd International Conference on New Trends in Education and their Implications* (pp. 795-809). Antalya, Turkey: Siyasal Kitabevi.
- Terhart, E. (2003). Constructivism and teaching: A new paradigm in general didactics? *Journal of Curriculum Studies*, 35(1), 25-44. doi: 10.1080/00220270210163653.
- Tyler, R. (1950). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press.
- Ülgen, G. (2001). *Kavram geliştirme: Kuramlar ve uygulamalar* (3. ed.). Ankara: PegemA Yayıncılık.
- Varış, F. (1988). *Eğitimde program geliştirme: Teori ve teknikler*. Ankara Üniversitesi Eğitim Fakültesi Yayınları, No: 157, Ankara: A.Ü Basımevi.
- Wahyudi, W. (2007, September). *Using metaphors to explore teachers' perceptions of school science curriculum: an Indonesian lower secondary schools case*. Paper presented at the Second International Conference on Science and Mathematics Education, Penang, Malaysia. Retrieved from <http://www.recsam.edu.my/cosmed/cosmed07/AbstractsFullPapers2007/SCIENCE%5CS040F.pdf>.
- Westbury, I. (2008). Making Curricula: Why do states make curricula, and how? In F. M. Connelly (Eds.), *The sage handbook of curriculum and instruction* (pp. 45-65). Thousand Oaks, CA: Sage.
- Wilson, B. G. (1997). Reflections on constructivism and instructional design. In C. R. Dills & A. A. Romiszowski (Eds.), *Instructional development paradigms* (pp. 63-81). Englewood Cliffs, NJ: Educational Technology Publications.
- Yaşar, Ş. (2013). Eğitimde program geliştirmeyi etkileyen sosyo-kültürel etmenler. *Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi*, 3(6), 1-8.
- Yurdakul, B. (2004a). *Yapılandırmacı öğrenme yaklaşımının öğrenenlerin problem çözme becerilerine, bilişötesi farkındalık ve derse yönelik tutum düzeylerine etkisi ile öğrenme sürecine katkıları* (Doctoral dissertation, Hacettepe University, Ankara, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi>
- Yurdakul, B. (2004b). Eğitimde davranışçılıktan yapılandırmacılığa geçiş için bilgi, gerçeklik ve öğrenme olgularının yeniden anlamlandırılması. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 4(8), 109-120.