

# Transformation of Centralized Curriculum into Classroom Practice: An Analysis of Teachers' Experiences

## Merkeziyetçi Öğretim Programlarının Sınıf-içi Uygulamaya Dönüştürülmesi: Öğretmen Deneyimlerinin Analizi

Ebru KAYA\*, Pinar Seda CETIN\*\*, Ali YILDIRIM\*\*\*

### Öz

Bu çalışmanın temel amacı öğretmenlerin merkezi programı nasıl sınıf uygulamasına dönüştürdüklerini incelemektir. Bu çalışma fenomenolojik (olgusal) bir çerçevede tasarlanmıştır. Özellikle, Türkiye'deki üç farklı lisede görev yapan yedi kimya öğretmenin yurt çapındaki programın sınıf uygulamasında kullanımı sürecindeki deneyimleri nitel görüşmeler yoluyla araştırılmıştır. Bu öğretmenler maksimum çeşitlilik örnekleme yöntemi kullanılarak seçilmiştir. Öğretmenlerin yurt çapında uygulanan programı nasıl algıladıklarını ve sınıfta nasıl uyguladıklarını belirlemek amacıyla araştırmacılar tarafından yapılandırılmış bir görüşme formu oluşturulmuştur. Elde edilen verileri analiz etmek için nitel içerik analizi kullanılmıştır. Sonuçlar "merkezi program algısı", "programın öğretmene yüklediği rol algısı", "merkezi programın düşünülen programa dönüşümü", "içsel faktörler", "dışsal faktörler" ve "programın geri yansması" temalarının, öğretmenlerin merkezi programı sınıf uygulamasına dönüştürme sürecindeki deneyimlerini yansıttığını göstermektedir.

**Anahtar Sözcükler:** Merkeziyetçi program, programın dönüşümü, öğretmenlerin deneyimleri, olgubilim çalışması

### Abstract

The main purpose of this study is to investigate how teachers transform the centralized curriculum into classroom practice. This study is designed within a phenomenological framework. Specifically, the experiences of seven high school chemistry teachers from three different high schools in Turkey during the implementation of nation-wide curriculum into classroom practice were studied through a qualitative in-depth interview. These teachers were selected based on maximum variation sampling method. A semi-structured interview schedule was designed by the researchers to determine how teachers perceive a nation-wide curriculum and implement it class. A qualitative content analysis approach was used to analyze the data obtained. The results show that the themes of "perception of centralized curriculum", "perception of teacher role attributed by curriculum," "transformation of centralized curriculum into thought curriculum," "internal factors on transformation", "external influences," and "reflection back on the curriculum" reflect teachers' experiences of transforming a centralized curriculum into classroom practice.

**Key words:** Centralized curriculum, transformation of curriculum, teachers' experiences, phenomenological study

---

\* Dr., Konya University, e-posta: ebrukaya@gmail.com

\*\* Assist. Prof. Dr., e-posta: psetin@ibu.edu.tr

\*\*\* Prof. Dr., Middle East Technical University, e-posta: aliy@metu.edu.tr

## Introduction

A common definition of curriculum is nonexistent among educators (Marsh & Willis, 2003). Portelli (1987) states that there are more than 120 definitions of curriculum in the literature. Among these definitions, curriculum can be broadly defined as learning experiences provided to students under the auspices of the school. This definition implies both planned and unplanned knowledge, skills, and attitudes (Sowell, 2005). Based on the objectivist approach, Kerr (1968) defines curriculum as the learning which is planned and guided by the school. This approach is also called top-down model. On the contrary, Stenhouse (1975) defines the curriculum as “an attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice” (Stenhouse, 1975). This approach is called process or down-top model (Galton & Blyth, 1989).

Educational systems of nations present differences in the way they develop and implement the curriculum in the school system. These systems have both advantages and disadvantages. While the locus of control in national curriculum is on the government, the school based curriculum gives more flexibility and voice to individual schools. The national curriculum is a framework used by all schools to ensure that teaching and learning is balanced and consistent. It includes the objectives to be attained, the subjects to be taught, the knowledge, skills and understanding to be acquired in each subject. It ensures that every pupil develops the knowledge, understanding, skills and attitudes necessary for their self-fulfillment and development as active and responsible citizens. It also communicates the expectations for learning and attainment explicit to pupils, parents, teachers, governors, employers and the public, and establishes national standards for the performance of all pupils in the subjects it includes. The national curriculum provides an arrangement of learning areas for all pupils, without considering social background, culture, gender, differences in ability and disabilities. Along with Turkey, Singapore, China, France, Hungary, Japan, Korea are some of the countries that have implemented national curriculum traditionally. There are also some countries that move in the national curriculum direction. In 1988, the UK has introduced its national curriculum in schools, and restructured teacher education system to train teachers in line with the new curriculum.

School-based curriculum development (SBCD) emerged in 1970's as an international trend departing from top-down curriculum to down-top curriculum. In SBCD, instead of a national or centralized curriculum, individual school districts and to some degree teachers are responsible for making the curriculum decisions. As Skilbeck (1984) defined it, SBCD refers to “the planning, design, implementation and evaluation of a program of students' learning by the educational institution of which those students are members” (p. 2). The aim of SBCD is to get more applicable curriculum innovations by the involvement of the teacher. By this way, individual students' needs and the communities' needs are considered. It is important to consider that there are many variations of SBCD. SBCD may be in the form of getting new curricular products or adapting already existing curriculum materials with respect to school characteristics (Walton, 1978). It can be achieved by individual teachers, group of teachers or a whole school staff. Furthermore, it can be long-termed, medium-termed, or short-termed (Marsh, 1992). Researches about SBCD revealed some challenges such as lack of time, lack of expertise, lack of finance, externally imposed restrictions and threatening school climate (Marsh, 1992).

The most important advantage of national curriculum is that it establishes a unified educational front by standardizing the educational system. In addition, it enhances certification of teaching standards. However, it is often criticized that planning and resource allocations become political because members of society such as students, parents, educational experts, and governments have different expectations from the educational system. Therefore, the group who keeps the control of power has the right of making decisions on educational issues (Duhou, 1999).

School based curriculum development gives rise to an ability to respond to the needs of class in a better way and staff's better awareness of the curriculum. In Bezzina's study (1991), it was reported that teachers perceived the principal as an important aid, the supplier of time and school climate. In addition, time was perceived as a barrier for the teachers because of perceptions of competing priorities and staff burnout. However, there is always a risk that the curriculum development process may be a time consuming and cost-cutting exercise because schools ask for the curriculum to be developed in a very short time period. Therefore, the participants cannot find enough time in order to reflect the curriculum critically, and thinking about the alternatives (Hannay, 1990).

The research on curriculum development and implementation practices plays an important role in assessing the effectiveness of the curriculum. There are many studies which investigate the factors that affect the implementation of the curriculum in the classroom. Roehrig, Kruse, and Kern (2007) stated that the transformation of the curriculum was strongly influenced by the teachers' beliefs about teaching and learning and the presence of supportive network at their school sites. According to Fullan (2001), characteristics of the change itself, local factors (teachers', principals', and district administrators' characteristics), and external factors (parents and community, government policy) were very effective in implementation of reform initiatives. In the literature, specifically factors influences science teacher practices in the classroom are also deeply investigated. These factors are determined as teachers' conceptual knowledge of their discipline (Carlson, 1993; Kruse & Roehrig, 2005, cited in Roehrig et al., 2007), structural knowledge of science (Brickhouse, 1990; Duschl, 1987, cited in Roehrig et al., 2007), and lack of reform-based pedagogical skills (Adams & Krockover, 1997; Shulman, 1986, cited in Roehrig et al., 2007).

As indicated above, the literature presents many reviews of centralized vs. decentralized educational systems in terms of their advantages and disadvantages, different ways of adapting them, and outputs they produce. These reviews present implications, challenges and opportunities and threats in relation to many aspects of these systems like teacher training and hiring, curriculum design, supervision, and assessment. In addition, the literature holds many studies investigating how curriculum is transformed into classroom instruction. However, most of these studies represent decentralized educational systems such the one in the US exploring ways and which teachers understand and implement curriculum in their own classrooms. But what about the centralized educational systems? What kind of challenges do they present for teachers in understanding and transforming it into classroom practice? The studies investigating the transformation process of centralized curriculum into classroom implementation are just few. Turkey's educational system presents a good example into understanding how this transformation takes place. Therefore, the main purpose of this study is to investigate how teachers transform the centralized curriculum into classroom practice.

## **Method**

### *Design of the Study*

This study is designed within a phenomenological framework. A phenomenological study describes individual experiences related to a specific phenomenon or concept (Creswell, 1998). In our case, a specific phenomenon, transformation of curriculum into practice, was investigated. Specifically, the experiences of high school chemistry teachers during the implementation of nation-wide curriculum into classroom practice were studied. The researchers examined the teachers' curriculum perceptions and implementation process of written curriculum through a qualitative in-depth interview.

### *Participants*

The research participants for the study included seven chemistry teachers from three different high schools in Turkey. These teachers were selected based on maximum variation sampling method which involved the purposeful selection of a wide range of cases in order to get the detailed description of the

studied phenomenon (Patton, 2002). The participants represented a variety of teaching experience in chemistry (from 12 to 31 year), content area backgrounds (degrees in chemistry science and chemistry education), and school characteristics such as demographics (two urban, and one suburban), school type (two public, and one private), school size (one small, one medium, and one large). All teachers participated voluntarily in the study.

### *Data Sources*

Interview was used as a data collection method. An interview is a purposeful conversation between two or more people to get information (Bogdan & Biklen, 1998). Individually conducted interviews were audio taped and transcribed. A semi-structured interview schedule was designed by the researchers to determine how teachers perceive a nation-wide curriculum and implement it class. The questions in the interview were related to issues like teachers' understanding of the chemistry curriculum, teachers' planning before the lesson, how teachers use curriculum in lesson preparation and classroom implementation, and the flow of the chemistry lessons. A total of 17 interview questions were used and each interview lasted approximately one hour.

### *Data Analysis*

A qualitative content analysis approach was used to analyze the data obtained. This process involved several phases: First, the transcribed responses of the participants were carefully read to identify the meaningful data units based on the purpose of the study. The units were labeled through the concepts borrowed from the literature or the terms used by the participants themselves. These labels helped identify the themes underlying the participants' opinions, perspectives and experiences. Through these themes, the data were organized and interpreted to reflect teachers' experiences of transforming a centralized curriculum into classroom practice (Creswell 1998; Patton, 2002).

## **Findings**

The results of the study were presented under six themes, "perception of centralized curriculum," "perception of teacher role attributed by curriculum," "transformation of centralized curriculum into thought curriculum," "internal factors on transformation," "external influences," and finally "reflection back on the curriculum."

### *Perception of Centralized Curriculum*

Teachers' perceptions in relation to the centralized curriculum can be assessed under several subthemes: yearly plan, textbook, timing, restrictions and academic notions. Teachers perceive the centralized curriculum as yearly plan because they use it at the beginning of the semester in order to plan the course topics through weekly sessions for the whole academic year. This plan aims to bring standardization among the teachers and the schools in terms of what they teach and when. In addition, these plans serve for the aim of checking whether the instruction flowed according to the predetermined schedule. So the centralized curriculum is perceived as source to plan weekly sessions throughout the semester and the academic year.

Centralized curriculum is also perceived as textbook by some chemistry teachers. They feel that the current textbooks are insufficient as instructional materials and so they have an expectation from the curriculum that it serves teachers like a textbook. For example, one participant said that "chemistry textbooks do not cover the topics in a detailed way. Furthermore they do not provide sufficient daily life examples, exercises and questions that would extend understanding of the topics covered." Since the textbooks are not of good quality, they use the curriculum guide as an instructional resource. From this perspective the curriculum is not perceived as sufficient. This is understandable since the curriculum is not meant to serve as a textbook. As a result, teachers determine the extent and the order of the course content by using their teaching experiences and additional sources. These findings indicate that the

perception and the use of the national curriculum in chemistry create an unintended impact on what teachers do and how they assess its adequacy. The unintended impact is the use of the curriculum in place of the textbook, and the assessment from this perspective is that the curriculum does not provide them with sufficient content coverage.

Timing is another issue in relation to the perception of centralized curriculum for teachers. Teachers argue that although the curriculum provides a general outline of topics, it does not specify the order and extent of the content, as a result there might be differences in the order and extent of coverage based on the experience of teachers and the level of students. This perception can be seen clearly from the statement of a teacher that

... the curriculum does arrange the time schedule specifically. If a course session coincides with a national holiday for example, the schedule changes. In order to catch up with the predetermined schedule, I have to go faster in my instruction because I must finish teaching the content on time.

Designing instruction through considering all aspects of the curriculum including timing and content is not an easy task for the teachers since they feel the pressure of supervisors who oversee teachers' plans and teaching based on the concepts and the principles of the curriculum. This results in a perception that the curriculum is restrictive. This perception is observed mostly among inexperienced teachers since they report having anxiety about reporting to the supervisors. This restriction forces teachers to skip topics without making sure that students really understand them.

Teachers argue that the curriculum is sometimes unrealistic, that is, it does not take into consideration of what teachers deal with in practice. Teachers think that the curriculum is prepared by academicians who are not practitioners in class, resulting in a theoretical and unrealistic curriculum. For instance, one of the teachers stated that "Academicians insist on including certain topics in the curriculum without taking our opinions. However we are in the classroom and we have a chance to observe everything during the implementation of the curriculum. They are not! So the curriculum should be determined not only by academicians, but also by teachers."

Moreover, some teachers state that the curriculum does not define clearly the teacher role, learning environment, language and content coverage. Therefore, additional help was required in the classroom such as the use of teacher book, laboratory book, exercise book, guidance from experts, and in-service education. When they had difficulties in implementing the curriculum, they required other sources to overcome these obstacles. When they could not find resources and help, they preferred not to consider the curriculum.

### *Role of Teacher Attributed by Curriculum*

Teachers' role definition as they draw from the curriculum included codes like 'being strict,' 'direct presenter,' 'user of inquiry method,' and 'facilitator.' Teachers thought that the curriculum promoted a strict role for teachers in establishing a quiet classroom environment in order to implement instruction. As a result they assumed the role of a direct presenter. Some teachers said that they acted as a facilitator in the class as well. The facilitator teachers reported that discussion in class improved students' learning. Therefore, they mentioned that the subjects in the curriculum should be given in such a way that students could find a chance to learn the subject by discussing with each other. According to some teachers, their role changed from class to class independence of the curriculum. The students' levels were reported as a critical factor because implementing the centralized curriculum in all classes in the same way was impossible. They said that the important factor that determines the teachers' role was not the curriculum, it was the classroom context. However, most of the teachers said that the curriculum did not attribute any role to the teachers. One of the teachers said that "it is not already necessary to address the teacher role in the curriculum. The role of a teacher is formed based on his/her experiences."

### *Transformation of Centralized Curriculum into Thought Curriculum*

Teachers reported their experiences of transforming centralized curriculum into thought curriculum in the way they carried out teaching and learning activities, review of previous lessons, explain new topics, give daily life examples, do exercises, make summary, give homework, prepare notes for students, take field trips, prepare daily and yearly lesson plans. When the teachers transformed the centralized curriculum into thought curriculum, they carried out various activities. For example, many teachers started the lesson by reviewing the previous lesson. They tried to create a discussion environment or ask questions to make the students understand the topics better. After a brief review, they explained the new topic by giving daily life examples, making students take notes, and doing exercises about the topic. Field trip was another activity during transformation of centralized curriculum. It was a way to help students apply what they learn in class and explore what is available outside the classroom in relation to the curriculum.

In the curriculum transformation process, teachers prepared daily lesson plans in order to organize the activities to be carried out, the content and extent to be covered, the examples to be solved, and timing. These daily lesson plans could formally or informally be prepared like small notes, interesting examples, or only the questions. Either formally or informally prepared, all the teachers agreed that the daily lesson plans were necessary and useful to teach the subjects determined in the curriculum.

Besides daily lesson plans, the teachers used yearly lesson plans to systematize the classroom practices. In Turkey, preparation of yearly lesson plan is also an obligation of the Ministry of National Education. Many teachers utilized yearly lesson plan to have a general view about the content and timing. However, some of them thought that it was not necessary and it was only an obligation. The teachers thought in this way also prepared daily lesson plans informally.

### *Internal Factors on Transformation*

Experience of teachers, students' level, and curriculum were explored as internal factors affecting the transformation of the curriculum into practice. Teachers' experiences highly influence this transformation process. Teachers with a teaching experience more than 15 years were successful in interpreting the curriculum, organizing the classroom activities, applying curriculum with respect to students' level. For example, a teacher with 12 years teaching experience stated that she could not comprehend the content of the curriculum and the ways to use it. However, as she became more experienced, she could transform the curriculum into practice more effectively. Students' level was one of the other factors affecting this process. If students' level was high, teachers could implement their intended lesson plans. If it was not, teachers had difficulties in the implementation process. For example, a teacher said that "if my students' level is low, I cannot give all content determined in the curriculum. I can give only the key points of the concepts with respect to their levels. Furthermore, I skip some challenging topics when I decided that their level is not sufficient to grasp them."

The other internal factor on transformation was the curriculum itself. Since the centralized curriculum did not consider the variations in students' characteristics, differences in curriculum implementation occurred. Teachers transformed the curriculum with respect to regional differences, school types, students' socio economic status, etc. However, the teachers claimed that a more detailed curriculum would be more useful in planning and implementing classroom activities.

The teachers utilized their teaching experiences and considered students' level when transforming the curriculum. For instance, one of the teachers said that "since the curriculum does not include any information about classroom activities, I determine them. For example, while giving homework to the students, I consider their level. If the level of the students in a class is high, I assign challenging works. In the opposite situation, I want the students to solve problems which are similar to those I went over in the classroom."

### *External Influences*

Besides internal factors, many external factors such as university entrance examination and collaboration with others were effective in transformation of the curriculum. In Turkey, high school students at the end of the twelfth grade are selected and placed in universities through a centralized exam. The content of this exam is determined by considering the centralized curriculum of the country. Since the university entrance exam directly determines student placement in universities and thereby their future career partially as well, it is of great importance for the students. Therefore, teachers take into consideration this exam while implementing the curriculum in class. In our study, because the students were responsible for all the curriculum content, the teachers were worried about covering the whole curriculum. This responsibility affected the classroom activities to be conducted, the number of exercises to be solved, the content and extent of the topics, time allocated for laboratory activities. For example, one of the teachers explained that “the students are motivated for solving many exercises to get a high score at the university entrance exam. Therefore, the lessons in the laboratory are not effective for the students. The students prefer to study for the exam instead of doing experiments in the laboratory and many activities to internalize the concepts in the classroom.”

In addition, although there were some problems in the implementation of the centralized curriculum, many teachers thought that curriculum should be centralized instead of school based because of this exam. Role of collaboration was reported to be another external influence in curriculum transformation. Teachers made collaboration with their colleagues, students’ parents, and department head in order to implement the curriculum in a more effective way. To determine the content of the course, to prepare the questions to be solved in the classroom, to discuss the effective teaching methods, the teachers shared their experiences with their colleagues. In order to be successful in chemistry, the students should have basic computational skills. Therefore, it was found that the chemistry teachers made collaboration especially with mathematics teachers during the curriculum implementation. In addition, chemistry teachers collaborated with the department head, biology and physics teachers while organizing classroom activities. During these collaborations, some experienced teachers reported to resist in suggestions and criticisms because they gave more importance to their experiences than the curriculum.

### *Reflections Back on the Curriculum*

The last theme related to transformation of centralized curriculum was determined as reflection back on the curriculum. When the teachers met some problems during the transformation process, they reflected on these points in order to resolve them for the next semester. For instance, one of the teachers mentioned that “the most encountered problem while transforming the curriculum is timing allocated to each topic. In the last year, I allocated three weeks for ‘reaction rate’ topic. However, it took me more time than I had planned. Therefore, I noted this trouble and at the beginning of this semester, I considered it while preparing yearly lesson plan.” Perception of static curriculum was another issue under this theme that the teachers often commented on. The teachers thought that they had no control on shaping curriculum because to cover topics in the curriculum was an obligation for the teachers.

## **Discussion and Conclusions**

This study analyzes teachers’ experiences of transforming a centralized curriculum into classroom practice through in-depth interviews with chemistry teachers from different schools. The results of the content analysis indicate that teachers’ experiences are categorized as perception of centralized curriculum, perception of teacher role defined by curriculum, transformation of centralized curriculum into thought curriculum, internal factors on transformation, external influences, and reflection back on the curriculum.

Teachers tend to perceive centralized curriculum as a major source for their yearly plans since the curriculum provides them with an outline of topics and a timeline for covering these topics throughout the term and the academic year. Teachers expect these inputs from the curriculum since the centralized curriculum aims to provide standardization among the teachers in terms of the content to be covered and timing. Teachers see the curriculum as an alternative to textbooks because the current curriculum provides them with instructional activities, forms, exercises, etc. From this point of view, the curriculum is seen as a resource to plan the order of the topics and timing. At the same time they criticize the curriculum in its guidance for content coverage and timing. In this respect they experience difficulty in transforming the curriculum into classroom practice. They suggest that curriculum should cover teacher role, learning environment, and the content of the course, and provide precise guidance for them. This tendency among teachers implicates that they are used to be guided clearly by the curriculum and when the guidance is not clear, they experience problem. This tendency separates them from other teachers who perceive curriculum as restrictive and complain about inflexibility (Bezzina, 1991; Hannay, 1990). The dependency on the curriculum is also evident in their complaints about lack of time and knowledge in using the learning activities covered in the curriculum. According to Roehrig and Kruse (2005), this is common among teachers.

Teachers' perceptions of their role as specified in the curriculum also provide implications for the way they transform the centralized curriculum into classroom practice. Teachers think that curriculum attributes a strict role to them since they should establish a productive learning environment to carry out the instruction in class. Teachers view themselves as a presenter in the classroom because of the necessity of following the instructions as stated in the curriculum. In addition, they sometimes assume a facilitator role in the classroom because they lead discussion during the class sessions. The literature indicates that teacher has a critical role in the implementation of curriculum in the classroom (e.g. Fullan, 2001; Roehrig & Kruse, 2005; Roehrig et al., 2007). On the other hand, the role of teachers is not attributed by the curriculum but it is attributed by the level of the students in a class. Students' level determines what teachers do to implement the instruction in their classes therefore the way of transforming centralized curriculum into classroom practice is not same in all classes.

Transformation of centralized curriculum into thought curriculum emerges as teaching and learning activities during a class session. Teachers transform centralized curriculum by reviewing previous lesson, explaining new content by giving daily life examples, making students take notes, and doing exercises related to the topic. Another way for transforming curriculum is field trip which provides an opportunity for students to explore the things, which they learned in classroom, outside. Furthermore, preparing daily (formally or informally) and yearly lesson plans with the aim of organizing all teaching activities contribute to the transformation of centralized curriculum into classroom. Therefore, it can be concluded that teachers transform curriculum as daily and yearly lesson plans to know either what they do or in which order they do them.

The results of the study showed that there are internal and external factors affecting transformation of curriculum. Internal factors on transformation involve experience of teachers, students' level, and the curriculum. It was reported in this study that as the teachers' experience and students' level increases, implementation of the curriculum can be more effective. Teachers with little experience in teaching may experience difficulties in commenting on and applying the curriculum. In addition to teachers' experience, their beliefs about teaching and learning were determined as an important factors affecting transformation (Roehrig et al., 2007). Since students' levels affect the implementation process and centralized curriculum is not highly sensitive to students' characteristics, curriculum itself was also determined as another internal factors affecting transformation of curriculum.



As well as the mentioned internal factors, some external factors affecting transformation of curriculum were stated. In Turkey, students are placed in the universities with respect to their scores in the countrywide university entrance examination. Attending and graduating from a respectable university helps them to secure a promising future career. Therefore it is not surprising that both students and teachers give great importance to university entrance examination and it affects the transformation of curriculum. During the implementation of curriculum, chemistry teachers collaborate with colleagues, students' parents, and the department head. This collaboration seems to be a critical factor in the transformation process. Fullan (2001) argued that besides local ones, external factors such as parents, community and government policy were very effective in implementation of reform initiatives.

Reflection back on the curriculum was reported as the last theme related to transformation of the curriculum. Under this theme, it was determined that reflections about "timing" and "perceptions of static curriculum" were more emphasized. Past experience of teachers in the implementation of curriculum appears to be a critical resource both for themselves and for their colleagues (Parke & Coble, 1997). In this study teachers indicated that they record the experiences especially about the problems in timing and share them with their colleagues. Teachers in this study thought that they have no control on shaping of the curriculum. However, as Ben-Chaim, Joffe and Zoller (1994) state, "the successful implementation of an innovative curricular program is dependent on the full active participation of the teachers involved in the decision-making process associated with the curriculum reform" (p. 365).

### References

- Ben-Chaim, D., Joffe, N., & Zoller, U. (1994). Empowerment of elementary school teachers to implement science curriculum reforms. *School Science & Mathematics, 94*, 355-366.
- Bezzina, M. (1991). Teachers' perceptions of their participation in schol based curriculum development: a case study. *Curriculum Perspectives, 11*(2), 39-47.
- Bogdan, R. C., & Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods* (3<sup>rd</sup> Ed.). Needham Heights, MA: Allyn & Bacon.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Duhou, I. A. (1999). *School-based management*. United Nations Educational, Scientific and Cultural Organization. France.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Galton, M., & Blyth, A., (1989). (Ed.) *Handbook of Primary Education in Europe*. London: David Fulton Publishers.
- Hannay, L. (1990). Canada: School-based curriculum deliberation. In C. Marsh, C. Day, L. Hannay, & G. McCutcheon (Ed.), *Reconceptualising school-based curriculum development* (pp. 140-172). London: The Falmer Press.
- Kerr J. F. (1968). *Changing the curriculum*. London: University Of London Press.
- Marsh, C. (1992). *Key concepts for understanding curriculum*. London: Falmer Press.
- Marsh, C. J., & Willis, G. (2003). *Curriculum: Alternative approaches, ongoing issues*. (3<sup>rd</sup> Ed.). New Jersey: Allyn & Bacon.
- Parke, H. M., & Coble, C. R. (1997). Teachers designing curriculum as professional development: A model for transformational science teaching. *Journal of Research in Science Teaching, 34*(8), 773-789.
- Patton, M. (2002). *Qualitative research and evaluation methods*. (3<sup>rd</sup> Ed.) Thousand Oaks, CA: Sage Publications.

- Portelli, J. P. (1987). Perspectives and imperatives on defining curriculum. *Journal of Curriculum and Supervision*, 2(4), 354-367.
- Roehrig, G. H., & Kruse, R. A. (2005). The role of teachers' beliefs and knowledge in the adoption of a reform-based curriculum. *School Science and Mathematics*, 105(8), 412-422.
- Roehrig, G. H., Kruse, R. A., & Kern, A. (2007). Teacher and school characteristics and their influences on curriculum implementation. *Journal of Research in Science Teaching*, 44(7), 883-907.
- Skilbeck, M. (1984). *School-based curriculum development*. London: Falmer Press.
- Sowell, E. J. (2005). *Curriculum: An integrative introduction*. (3<sup>rd</sup> Ed.). New Jersey: Allyn & Bacon.
- Stenhouse L. (1975). *An Introduction to Curriculum Research and Development*. London: Heinemann.
- Walton, J. (1978). *School-based curriculum development in Australia. Some perspectives on school-based curriculum development*. Armidale, Australia: University of New England.

## Geniş Özet

### Merkeziyetçi Öğretim Programlarının Sınıf-içi Uygulamaya Dönüştürülmesi: Öğretmen Deneyimlerinin Analizi

Ulusların eğitim sistemleri, program geliştirme ve bu programı okullarda uygulamalarına göre farklılık göstermektedir. Bu sistemlerin hem avantajları hem de dezavantajları vardır. Ulusal programda kontrolün hükümette olmasına karşın, okul tabanlı program bireysel okullara daha fazla esneklik ve söz hakkı verir. Ulusal program öğretim ve öğrenmenin dengeli ve uyumlu olmasını sağlamak için tüm okullar tarafından kullanılan bir taslaktır. Ulaşılabilecek hedefleri, öğretilecek konuları ve her bir konuda elde edilecek bilgi, beceri ve anlamları içerir. Her öğrencinin aktif ve sorumlu vatandaşlar olarak gelişimi için gerekli bilgi, anlama, beceri ve tutumlar geliştirmelerini sağlar. Ulusal program sosyal alt yapı, kültür, cinsiyet, yeterlik ve yetersizliklerdeki farklılıkları dikkate almaksızın tüm öğrenciler için öğrenme ortamlarının düzenlenmesini sağlar. Türkiye'nin yanı sıra Singapur, Çin, Fransa, Macaristan, Japonya ve Kore Ulusal programı geleneksel olarak uygulayan ülkelerden bazılarıdır.

Program geliştirme ve uygulama üzerine yapılan araştırmalar programın etkililiğini değerlendirmede önemli rol oynamaktadır. Programın sınıf içinde uygulanmasını etkileyen faktörleri inceleyen birçok çalışma vardır. Fakat merkezi programın sınıf uygulamasına dönüşüm sürecini inceleyen çalışmalar sınırlı sayıdadır. Türkiye'nin eğitim sistemi bu dönüşümün nasıl gerçekleştiğini anlamak açısından iyi bir örnek sunmaktadır. Bu çalışmanın amacı, öğretmenlerin merkezi programı nasıl sınıf uygulamasına dönüştürdüklerini incelemektir.

Bu çalışma fenomenolojik (olgusal) bir çerçeve içinde tasarlanmıştır. Spesifik olgu olarak programın uygulamaya dönüşümü incelenmiştir. Özellikle, Türkiye'deki üç farklı lisede görev yapan yedi kimya öğretmenin yurt çapındaki programın sınıf uygulamasında kullanımı sürecindeki deneyimleri nitel görüşmeler yoluyla araştırılmıştır. Bu öğretmenler maksimum çeşitlilik örnekleme yöntemi kullanılarak seçilmiştir. Seçilen öğretmenler, kimya öğretimindeki deneyimleri (12 yıllıktan 31 yıllığa kadar), kimya alan bilgisi alt yapıları (kimya ve kimya eğitimi mezunu) ve çalıştıkları okulun, demografik bilgileri (şehir merkezindeki iki okul, şehir çevresindeki bir okul), okul türü (iki devlet lisesi, bir özel lise), okul büyüklüğü (bir küçük, bir orta büyüklükte ve bir büyük okul) gibi özellikleri açısından farklılık göstermektedir.

Öğretmenlerin yurt çapında uygulanan programı nasıl algıladıklarını ve sınıfta nasıl uyguladıklarını belirlemek amacıyla araştırmacılar tarafından yarı yapılandırılmış bir görüşme formu oluşturulmuştur. Görüşmedeki sorular öğretmenlerin kimya programını anlamaları, öğretmenlerin ders öncesindeki hazırlıkları, öğretmenlerin dersi hazırlarken ve sınıfta işlerken programı nasıl kullandıkları ve kimya derslerinin akışı ile ilgilidir. Elde edilen verileri analiz etmek için nitel içerik analizi kullanılmıştır. Öncelikle, katılımcıların verdiği yanıtlar çalışmanın amacına bağlı olarak anlamlı veri birimlerini belirlemek için dikkatlice okunmuştur. Bu birimler alan yazında yer alan kavramlar ya da katılımcılar tarafından kullanılan terimler yardımıyla sınıflandırılmıştır. Bunlar, katılımcıların düşünceleri, bakış açıları ve deneyimlerini kapsayan temaları belirlemede yardımcı olmuştur. Bu temalar sayesinde, öğretmenlerin merkezi programı sınıf uygulamasına dönüştürmedeki deneyimlerini yansıtmak üzere veriler düzenlenmiş ve yorumlanmıştır. Sonuçlar “merkezi program algısı”, “programın öğretmene yüklediği rol algısı”, “merkezi programın düşünülen programa dönüşümü”, “içsel faktörler”, “dışsal faktörler” ve “programın geri yansması” temalarının, öğretmenlerin merkezi programı sınıf uygulamasına dönüştürme sürecindeki deneyimlerini yansıttığını göstermektedir.

Öğretmenler, dönem ve akademik yıl boyunca işlenecek taslak konuları ve bu konuların işlenmesi için gerekli zaman çizelgesini sağladığından, merkezi programı yıllık planlar için temel bir kaynak olarak algılamaktadır. Merkezi program içerik ve zamanlama açısından öğretmenler arasında bir standart oluşturmayı amaçladığı için öğretmenler programdan bu girdileri beklemektedir. Öğretmenler programı öğretim etkinlikleri, formlar, alıştırmalar vs. sağladığından ders kitaplarının alternatifi olarak görmektedir. Bu açıdan, program konuların sıralamasını ve zamanlamasını planlamak için bir kaynak olarak görülmektedir. Aynı zamanda, öğretmenler programı kapsam ve zamanlama yönlendirmesi açısından eleştirmektedir. Öğretmenler sınıfta verimli bir öğrenme ortamı sağlamaları gerektiğinden programın kendilerine otoriter bir rol yüklediğini düşünmektedir. Programda yer alan konuları takip etme gerekliliği yüzünden kendilerini sunucu ve dersteki tartışmalara yön verdikleri için yöneten (kolaylaştıran) kişi olarak görmektedir. Öğrencilerin seviyeleri öğretmenlerin sınıflarda ders işlerken yapacaklarını belirlemektedir. Bu yüzden, merkezi programın sınıf uygulamasına dönüşüm şekli tüm sınıflarda aynı değildir. Öğretmenler, önceki dersi gözden geçirerek, günlük hayattan verdiği örneklerle yeni konuyu açıklayarak, öğrencilere not tutturarak ve konuyla ilgili alıştırmalar yaparak merkezi programı sınıf uygulamasına dönüştürmektedir. Öğretmenler yapacakları şeyleri ya da bunları hangi sırada yapacaklarını bilmek için programı günlük ve yıllık plan olarak dönüştürmektedir.

Programın dönüşümünü etkileyen içsel faktörler öğretmenlerin deneyimleri, öğrencilerin seviyeleri ve programdır. Öğretmenlerin deneyimleri ve öğrencilerin seviyeleri arttıkça programın uygulaması daha etkili olabilir. Öğretimde tecrübesi az olan öğretmenler programı yorumlamada ve uygulamada zorluk yaşamaktadırlar. Türkiye’de, ülke genelinde uygulanan üniversite giriş sınavı programın dönüşümünü etkileyen dışsal bir faktördür. İyi bir üniversiteye girmek ve buradan mezun olmak onlara umut verici bir gelecek sağlamaktadır. Bu yüzden, hem öğrencilerin hem de öğretmenlerin üniversite giriş sınavına çok önem vermeleri ve bunun da programın dönüşümünü etkilemesi şaşırtıcı değildir. Öğretmenlerin programı uygularken edindikleri deneyimler hem kendileri hem de meslektaşları için kritik bir kaynak olarak ortaya çıkmaktadır. Bu çalışmada, öğretmenler özellikle zamanlama konusunda yaşadıkları problemlerle ilgili deneyimlerini aktarmışlar ve bu deneyimleri meslektaşlarıyla da paylaştıklarını dile getirmişlerdir. Ayrıca, programın şekillenmesinde hiçbir etkilerinin olmadığını düşünmektedirler. Bu nedenle öğretmenlerin, programın oluşturulması ve yeniden yapılandırılması sürecinde aktif rol almaları önerilmektedir.

