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Adaptation of Curriculum by Classroom Teachers: A Case Study of Mathematics Curriculum[1]

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Abstract

The purpose of this study is to investigate the adaptation of the national primary school mathematics curriculum through the lesson plans designed and their implementations in class by classroom teachers and the factors affecting these adaptation processes. To achieve this purpose, a case study design was used. Using the maximum variation sampling method, data were collected from 12 classroom teachers in the central district of a city located in Türkiye's Central Anatolia Region. The data sources consisted of semi-structured interviews, lesson plans, weekly schedules, daily practice evaluation forms, teaching materials, lecture notes, student assignments, worksheets, activities, and supplementary resources. The thematic content analysis approach was used to analyze the data. The findings showed that teachers did not strictly adhere to the official curriculum; instead, they adapted it at a modest level. Their adaptations included extending content, omitting surface-level material, and replacing or revising content elements. Teachers´ adaptations of the curriculum were primarily affected by teacher-related factors, followed by student-, school-, parent-, and curriculum-related considerations.

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Introduction

Effective curriculum implementation is largely influenced by teachers´ planning, implementation, and evaluation of teaching and learning processes. Curricula are adapted by teachers for various reasons. According to Glatthorn (2000), there are seven types of curricula: recommended, written, taught, supported, learned, assessed, and implicit curricula, and it is important to achieve compatibility among different types of curricula to ensure student success and the achievement of outcomes. One may state that it is not usually possible to completely adhere to a curriculum in centralized education systems, such as in Türkiye (Ünver, 2021). It was reported that teachers did not exactly implement the existing curricula, but they instead altered these curricula according to various factors, including the structure and objective of their sessions, and student characteristics, knowingly or unknowingly (Bümen & Yazıcılar, 2020). While these adjustments are necessary for an effective teaching process, they may also lead to negative consequences. Therefore, it is crucial to investigate the adjustments teachers make, the reasons behind these adjustments, and their impact on teaching efficiency. This study is based on the assumption that curriculum adaptation is not a deviation from the official curriculum but as a natural outcome of a teacher's professional competence and agency. Teachers consciously or unconsciously make curricular decisions based on specific classroom conditions, subject matter, and student needs (Bümen & Yazıcılar, 2020). In our study, we built upon the idea that in a centralized educational system like Türkiye's, not only is perfect fidelity not possible, but a blind adherence to the curriculum can negatively impact a teacher’s creativity and the overall efficiency of the teaching process (Ünver, 2021). Adaptation is considered an inevitable process that enhances the curriculum's effectiveness and makes learning more contextually relevant.

In various studies, researchers have sought to identify the types of adjustments teachers make when they deviate from the curriculum (Drake & Sherin, 2006; Li & Harfitt, 2017). Yazıcılar and Bümen (2019) stated that the types of curriculum adaptations made by teachers included omitting, extending, and replacing or revising, thereby revealing patterns of curriculum adaptation. Studies conducted in Türkiye have shown that the most prevalently employed patterns of adaptation by teachers are "extension" (enriching the existing content, adding to it), "revision" (changing the order or content of targeted outcomes), and "omission" (skipping some topics or targeted outcomes, or discussing them superficially) (İlhan & Bümen, 2023; İlhan, 2022; Koç, 2022; Yazıcılar Nalbantoğlu, 2021; Bümen & Yazıcılar, 2020; Yazıcılar & Bümen, 2019). The usage frequency and style of these patterns may vary depending on some factors. It is seen that teachers make various adjustments due to factors such as the support provided by school administrators and families, the pre-service education of the teachers, the readiness levels of their students, and the curriculum literacy levels of the teachers (İlhan & Bümen, 2023; Karakuyu, 2023; Kasap Erdal et al., 2023; Uludağ Çınar, 2023).

While all subjects are important in the process of achieving the general goals of the Turkish national education system, mathematics education at the primary school level is of particular importance. This is because it involves mathematics skills used in daily life, forms the basis for other skills, and lays the foundations for the development of problem-solving and analytical thinking skills in students. However, considering that mathematics achievement levels in Türkiye are below the average of the Organisation for Economic Co-operation and Development (OECD) countries, it is clear that the quality of mathematics education needs to

be improved (OECD, 2023). Given that the mathematics curriculum is structured progressively in terms of learning outcomes and content and that prior knowledge is critical for future learning, it is important to pay special attention to the adaptation efforts made by teachers in the mathematics curriculum (Ministry of National Education-MoNE, 2018). Nevertheless, there are few studies conducted in Türkiye on the adaptations made by primary school teachers compared to other educational levels (e.g., Akbulut Taş, 2022; Bilgiç & Batu, 2023; Gelmez Burakgazi, 2020; Güzel Yüce, 2022; İlhan & Bümen, 2023; Kasap Erdal et al., 2023; Koç, 2022; Tokgöz Can & Bümen, 2021; Yazıcılar Nalbantoğlu, 2021).

Studies in the field of mathematics education have shown that teachers adapt the official curricula in various ways. Bümen and Holmqvist (2022) demonstrated that Turkish and Swedish primary school mathematics teachers adjusted their curricula through extensions, revisions, and omissions; however, their reasons for these adjustments were different from each other. Yazıcılar Nalbantoğlu (2021) found that a professional development program for middle school mathematics teachers improved the curriculum adaptation skills and awareness of teachers, and teachers took part in adaptations, especially omissions, more deliberately and frequently. Studies focusing on high school mathematics teachers have revealed that they implement adaptations such as omission, addition, time adjustment, and usage of different materials for reasons including the perceived needs of students, central examinations, and the education system, they implement these adaptations during classes even though they do not reflect them in their lesson plans, and their reasons for adaptations vary according to the student profiles of their schools (Yazıcılar & Bümen 2019; Yazıcılar 2016). Furthermore, Dikbayır (2018) reported that there was a moderate degree of compatibility among the designed, implemented, and assessed curricula for high school mathematics; however, teachers did not completely adhere to the designed curriculum due to reasons such as a lack of knowledge and physical resources. Dikbayır and Bümen (2016) demonstrated that 9th-grade mathematics teachers were unable to fully adhere to the curriculum's teaching and evaluation processes; instead, they made adaptations based on the characteristics of their students, and they did not utilize alternative measurement instruments. All these studies have demonstrated that during the mathematics education process, teachers actively intervene in curricula and make adaptations influenced by various factors, such as the flexibility of the curriculum, student needs, examination pressure, and professional development. In particular, considering the significant role that national exams play in the implementation process of curricula, it is important to understand the decisions teachers make during the curriculum adaptation process and the variables that influence this process. This helps identify the adaptations made by classroom teachers in mathematics classes, which, in turn, positively contribute to mathematics teaching and, consequently, student achievement (İlhan, 2022).

In line with this need, the aim of this study is to investigate the adaptations that classroom teachers make to the primary school mathematics curriculum during its implementation, as well as the factors influencing these adaptations in relation to the national curriculum, the lesson plans they design before classes, and the plans they implement during classes. In line with this general purpose, the following questions are addressed:

1. How do the official curriculum and the lesson plans designed by teachers differ with respect to their objectives, content, learning experiences, and evaluation components?

2. How do the lesson plans designed by teachers and the plans they implement in the classroom differ with respect to objectives, content, learning experiences, and evaluation components?

3. What are the factors affecting teachers´ adaptations of the national curriculum in the context of the lesson plans designed by them and the plans they implement?

Method

Research Design

In this study, a case study design was used to examine how classroom teachers adapt the primary school mathematics curriculum. According to Creswell (2013), a case study is a qualitative research design in which one or more cases, bound by time, are examined in depth using various data collection tools, and themes related to the cases are revealed. The case in this study is the mathematics curriculum and its adaptation, which is studied through multiple data sources.

The latest primary school mathematics curriculum was developed in 2018. The curriculum comprises learning outcomes organized under four main learning areas: Numbers and Operations, Geometry, Measurement, and Data Processing. Designed with a spiral structure based on the Basic Law of National Education No. 1739 and contemporary educational approaches, the curriculum aims to cultivate individuals who possess 21st-Century Skills, critical thinking abilities, and the capacity to relate mathematical concepts to daily life. It targets the development of students who can integrate mathematical language into their lives, demonstrate basic numerical and scientific reasoning, and possess self-confidence alongside moral integrity. The content is designed to progress across grade levels, starting from basic natural numbers and geometric shapes in the first grade to more complex operations, fractions, and data analysis by the fourth grade, while explicitly providing teachers with the flexibility to adapt instructional methods, material use, and assessment strategies according to student characteristics and environmental factors.

Participants

The participants are 12 classroom teachers working at public primary schools in the central district of a city located in Türkiye's Central Anatolia region, during the fall semester of the 2023-2024 academic year. Teachers were selected through correspondence with the Provincial Directorate of National Education regarding the study, and from among those who voluntarily wanted to participate in the study. Maximum variation sampling was employed to select participants (Yıldırım & Şimşek, 2021), considering differences in gender, seniority, classroom size, and grade level to include diverse participants in the study. Table 1 presents key characteristics of the participants.

Table 1

Characteristics of the Participants

Teacher	*Gender*	*Seniority (Year)*	*Classroom Size*	*Grade Level*
T1	Female	5	47	4
T2	Female	7	25	1

Table 1 (Continued)

T3	Female	8	38	4
T4	Female	4	25	1
T5	Female	4	48	1
T6	Female	17	33	4
T7	Female	12	24	1
T8	Female	5	30	3
T9	Female	28	20	4
T10	Male	13	18	2
T11	Female	21	28	1
T12	Male	10	10	4

Data Collection Instruments

Data were primarily collected through a Semi-Structured Interview Form, a Weekly Schedule Form and a Daily Practice Evaluation Form, supplemented by the primary school mathematics curriculum, teachers´ plans, lecture notes, and student assignments.

Semi-structured interview form, designed to identify the adaptations made by the participants in the curriculum and underlying factors, was established by reviewing the relevant literature (İlhan & Bümen, 2023; İlhan, 2022; Koç, 2022; Yazıcılar Nalbantoğlu, 2021; Bümen & Yazıcılar, 2020; Yazıcılar & Bümen, 2019), requesting the opinions of three experts in educational sciences, and the regulations of MoNE (2018). The interview form was finalized after a pilot implementation with two teachers.

Weekly schedule and daily practice evaluation forms were created by the researchers through the literature review and curriculum mapping techniques (Hale, 2008). Curriculum mapping primarily serves as a tool for visualizing the alignment and relationships between a curriculum's components. In this study, curriculum mapping is employed as an analytical tool to identify inconsistencies and adaptation points between the participants' lesson plans and the official curriculum. Specifically, Hale's (2008) classifications of horizontal and vertical alignment allowed us to systematically examine the changes the participants made to the objectives, content, and evaluation components within their lesson plans. This approach enabled us to pinpoint exactly the moments during the transition from the official curriculum to the lesson plans when participants engaged in specific adaptation practices, such as extension, omission, or revision. We focused on aligning the elements within a specific unit, as well as tracking how topics and objectives evolved over time to identify where participants expanded upon content (extension), superficially covered or skipped material (omission), and revised or replaced curricular elements to better suit their students.

The draft daily practice evaluation and weekly schedule forms were submitted to two curriculum experts to receive feedback and then piloted with two teachers.

These forms included areas such as “Code-Classroom of the Participant”, “Learning Area/Sub-Area”, and “Outcomes”, “Learning and Teaching Methods”, “Materials Used” (the participants were asked to specify supplementary resources and specific materials such as

video links and activity photos), and "Measurement and Evaluation" (with the photos of the instruments used, as well as explanations if necessary). In addition, it included the headings of "Date" and "Expected Time to Achieve the Outcome", as well as sections about a brief summary of the classes that day ("Please briefly describe the process that you followed in your mathematics classes today") and practices applied differently from the weekly schedule and the reasons for these differences ("Considering your teaching process today, what did you do differently from your previously planned weekly schedule, and what were the factors affecting your plans?"). Under the heading "Measurement and Evaluation", the participants were asked to provide reasons in cases when they had not implemented a practice planned beforehand.

Data Collection Procedures

Data were collected during the fall semester of the 2023-2024 academic year, with the participation of 12 classroom teachers from primary public schools in the central district of a city located in Türkiye's Central Anatolia region. First, data were collected using the daily evaluation and weekly schedule forms; which were completed by the participants. The participants were informed about the timing of completing the daily practice evaluation form, as well as the points to pay attention to while filling it out. After the form was filled out, and the targeted outcomes were completed, the notebooks of the students, the assignments/worksheets given to the students, textbooks, supplementary materials, and Education Information Network (EBA) materials were collected by visiting the schools of the teachers as supporting data.

After analyzing these materials, two interviews were conducted with the teachers. Before the interviews, the teachers were provided with information about the purpose of the interview, its expected duration, and the number of questions to be asked.

The primary school mathematics curriculum was downloaded from the website https://mufredat.meb.gov.tr/ on June 16, 2023, as the official document implemented by teachers.

Data Analysis

Data from the daily practice evaluation forms and interview transcriptions were transferred to a qualitative data analysis program. The content analysis was used through a codebook established based on the literature. Initially, a code list was developed based on the framework of factors affecting curriculum fidelity identified by Bümen et al. (2014) and the curriculum adaptation patterns outlined by Yazıcılar, Bümen, and Uslu (2021). At this stage, the relationships between the results obtained from the interviews with the participants and those obtained using the forms were also examined. Deductive and inductive processes were used in data analysis to work with codes, categories, and themes (Creswell & Plano Clark, 2014).

Deductive code list for curriculum adaptations included extension, omission, and revision. The codes for the factors affecting curriculum adaptation were teacher characteristics, student characteristics, education system, central examinations, curriculum characteristics, the school environment, and regional factors (Bümen et al., 2014). The inductive code list for curriculum adaptations involved the utilization of web-based applications, the inclusion of topics and objectives for different grade levels, and the implementation of additional activities. Their adaptations in the form of omission included superficial discussion of some topics and

objectives, skipping others, and not utilizing textbooks. Finally, their adaptations, in the form of revisions, involved discussing objectives under a different learning area and using methods that differed from those officially required by the objectives.

The teacher-related factors that affected curriculum adaptations included the teaching-learning approach adopted by the teacher, the teacher's attitude toward the curriculum, the teacher's classroom management skills, and psychological factors. The student-related factors included cognitive characteristics, physiological factors, differences in student levels, student absenteeism, and classroom accidents and injuries. The curriculum-related factors included textbook-curriculum compatibility, the structure of the curriculum, and compatibility between the curriculum and the preparedness of students. School-related factors included the physical structure of the school, the activities conducted at the school, the funding of the school, human resources, and differences in working hours. Parent-related factors consisted of the support provided to students by parents, the socio-economic structure of families, and the communication between parents and teachers.

In analyzing the interview data, the adaptations and influencing factors were examined to derive the codes. The consistency of the codes was assessed by comparing them with those used in similar previous studies to enhance the reliability of the analysis.

In our analysis of the weekly schedule and daily practice evaluation forms obtained from teachers, we employed a systematic and multi-layered approach. For the weekly schedule forms, we examined each targeted learning outcome and its taxonomic level, assessing whether the instructional process was designed in accordance with Bloom’s taxonomy. We evaluated the appropriateness of the selected teaching methods and techniques, as well as the validity of the assessment strategies employed, specifically considering their alignment with the expectations set forth in the mathematics curriculum. Additionally, teachers were asked to provide detailed information regarding the supplementary resources referenced in their planning, as well as video and photographic records of the activities conducted during lessons. This enabled us to obtain more reliable data about the instructional process and to identify adaptations that teachers themselves may not have been consciously aware of.

For the daily practice evaluation forms, we sought to capture teachers’ feedback regarding the fidelity of classroom implementation to the processes outlined in their weekly schedule forms. This enabled us not only to document the adaptations made by teachers but also to report the underlying reasons for these modifications. Furthermore, we identified deviations from the weekly plans and systematically analyzed these discrepancies.

Throughout this process, we addressed the following core questions during the analysis of the forms and their appendices:

1. Is alignment between the national curriculum and the teachers’ weekly schedule forms evident in terms of targeted learning outcomes?
2. Is alignment between the national curriculum and the teachers’ weekly schedule forms evident in terms of content?
3. Is alignment between the national curriculum and the teachers’ weekly schedule forms evident in terms of the instructional process?

4. Is alignment between the national curriculum and the teachers' weekly schedule forms evident in terms of assessment?
5. Is alignment between the weekly schedule forms and the daily practice evaluation form evident in terms of targeted learning outcomes?
6. Is alignment between the weekly schedule forms and the daily practice evaluation form evident in terms of content?
7. Is alignment between the weekly schedule forms and the daily practice evaluation form evident in terms of the instructional process?
8. Is alignment between the weekly schedule forms and the daily practice evaluation form evident in terms of assessment?

Subsequently, examined the patterns of curriculum adaptation that emerged from these discrepancies and investigated the underlying factors contributing to such adaptations.

Trustworthiness

To establish credibility, measures such as prolonged engagement with participants, data triangulation, member-checking, and expert consultation were implemented. The draft form created for qualitative interview questions was reviewed by experts and revised based on their feedback. Additionally, the draft interview form was used in a pilot implementation with a group of teachers to determine whether the questions were understood correctly, leading to the final version of the form. This ensured that the questions were appropriately aligned with the aims of the study. The interviews were recorded, and after transcription, the recordings were analyzed. Points that were unclear in the responses of the participants were verified by them. The findings were supported by including direct quotes from the participants, providing detailed descriptions of the results. Furthermore, data triangulation was achieved through the use of a weekly schedule form, a daily practice evaluation form and a semi-structured interview form. Consistency was established through coherence in the design of data collection tools in line with the aim and design of the study, the data collection process, data analysis, and the reporting of findings.

Results

The results obtained from the analyses of the collected data are presented in this section based on the research questions.

Adaptation of the National Curriculum through Teachers´ Instructional Plans

Classroom teachers did not fully adhere to the official curriculum but made various adaptations such as extension, omission, replacement, or revision. In the context of extension, most participants utilized supplementary resources and used web-based applications. Most frequent adaptations were utilizing supplementary resources, followed by the utilization of web-based applications, incorporating topics and learning outcomes from a different grade level, associations with other subjects, and conducting additional activities. One statement that represents this adaptation process is below:

> I generally use some pages from the internet, and in fact, while filling out this form and creating the lesson plan, I included a few of them. I usually make use of these sources,

> and then I check if the material I obtained is suitable for the levels of my students, making reductions or additions as needed. We don't use textbooks at all. We always progress in teaching by using different resources. (Interview, T4)

In the context of extension, some teachers made adaptations by conducting extra activities and making connections to other subjects, while others addressed topics and achievements related to different grade levels.

> For example, let's say a topic I taught in fourth grade… It might have been forgotten, so I might go back and expand on the topic, such as fractions, if it had been overlooked. Since it might have been skipped over previously, and considering that a year has passed, it may have been forgotten, so I revisit that targeted achievement in more detail and provide examples for reminder purposes. (Interview, T9)

> In my third lesson, I will ask for the English equivalents of the mathematical results that come up during the math group competition game. (Weekly schedule, T10)

> Then, I will make the topic enjoyable and help students grasp it by using online interactive games. (Weekly schedule, T1)

In the context of the adaptations made by the teachers in terms of omission, most addressed the topic and targeted outcomes superficially, while some participants did not use the textbooks and made adaptations by omitting topics and some targeted outcomes. Furthermore, while some rarely ignored textbooks and targeted outcomes, most also made superficial adaptations to topics and targeted outcomes more frequently.

> Sometimes I skip topics. The reason is that I covered these topics last year and spent a lot of time on them, so I don't want to spend more time on them. Instead, we focus more on new topics that the students haven't learned before. For known topics, I generally skip or briefly address them. (Interview, T11)

In the context of replacement and revision, one teacher used a different teaching method required by the targeted outcome in the curriculum

> I said I don't change the position of the targeted outcomes, but actually, I do change them sometimes if I face difficulties. (Interview, T10)

The interview and daily practice evaluation data revealed that, overall, teachers adhered to the structural aspects of the mathematics curriculum, including content and goals. Nevertheless, they primarily implemented extensions to improve the learning and teaching process. All teachers occasionally made adaptations related to the topic and targeted outcomes. Based on these adaptations, while teachers tried to adhere to the stated aspects of the mathematics curriculum, they did not always follow them completely.

> I pay attention to these (aspects mentioned in the curriculum) because I believe it is important. Otherwise, there really is no lasting learning. (Interview, T8)

Adaptation of Lesson Plans through Classroom Implementation

The teachers made various adjustments between their lesson plans and their classroom implementation. They primarily made adaptations in the form of extension, followed by replacement or revision, and finally, omission.

In the context of extension, teachers mostly added supplementary activities, then included topics and objectives from different grade levels, and made connections with other subjects.

> At the end of this process, if there are students who do not understand the topic, I consider briefly reviewing the topic. Otherwise, since the topics are in a spiral form, they will struggle to understand future topics. (Daily practice evaluation, T1)

Regarding the replacement or revision, some teachers used different methods and materials than originally planned, others postponed previously planned activities, and others used time allocated for other subjects. They mostly used different methods and materials, followed by using time allocated for other subjects and postponing planned activities.

> I wanted to teach place value using spaghetti and Play-Doh, but the students ate the spaghetti. (Interview, T4)

> In my weekly planning, I stated that I would use the geometry board, but I couldn't find the material at the stationery store. Instead, I had the students do an activity using sticks and buttons. (Daily practice evaluation, T11)

Overall, the adaptations by teachers between their designed and implemented lesson plans involved adding supplementary activities and providing fewer activities than planned. This indicated that they made omissions in their lesson plans during implementation, but attempted to maintain a teaching process that represents the curriculum at a general level.

Factors Affecting Curriculum Adaptations

Teachers´ individual approach to learning and teaching was the most frequently cited factor in influencing their decisions on curricular adaptations.

> I might extend it for another week if necessary; in the first three days of the following week, I will try again to present the topic in a way that they can understand it. I don't give the targeted outcome within a specific period. Whenever they understand it, then I move on to the next topic. There is no point in moving on to another topic without understanding. Let them digest it first, then we can move on. (Interview, T1)

With a goal of student-centered teaching, teachers made various adaptations to the mathematics curriculum according to their students' understanding and learning speeds, thus adjusting the suggested durations and content or participating in teaching activities aimed at further learning.

In addition to their approach to learning and teaching, teachers made adaptations due to their attitudes toward the curriculum, their classroom management skills, and due to various psychological factors. Some participants had a flexible attitude toward the adaptation of the curriculum based on their professional experience. However, the general opinion among the participants was to adhere to the curriculum, but if adaptations were to be made, they should be aimed at reinforcing and enriching the teaching process. Nonetheless, it was also found that the participants, regardless of their seniority, experienced helplessness in implementing the curriculum. Additionally, classroom management skills emerged as another influential factor in their adaptations of the mathematics curriculum. Specifically, sudden situations occurring during classes influenced the implementation of the lesson plans and led to various modifications in the designed plans.

> I want to make changes. For example, when talking about primary school-level mathematics, very limited information is provided on geometry. I generally see that students can handle more, so additional content can be included in those areas. (Interview, T12)

Regarding the student-related factors, it was observed that most teachers made adaptations primarily based on the cognitive characteristics of their students. Students' attitudes toward mathematics, participation in classes, learning difficulties, attention deficits, and self-discipline significantly influenced the adaptations.

> I have students do their homework in the classroom instead of leaving it at home because when I leave it, it usually comes back torn or with food stains. They don't care as much, or they bring it back scribbled. I have them do it one by one in the classroom. (Interview, T5)

In terms of school-related factors affecting the adaptations made to the designed and implemented lesson plans, teachers made adaptations due to the physical structure of their schools. Teachers faced issues in obtaining materials for classes due to limitations in school resources and tried to compensate for these deficiencies through their own efforts. Furthermore, malfunctions of equipment like smart boards, which were used extensively by teachers to capture the attention of their students and compensate for the lack of tangible materials, and power outages led the participants to make various adjustments in the implementation of their designed lesson plans.

> There is no math-related material at the school, so I have to either make it myself or show visuals to the children. There are no ready-made materials. For example, we are thinking of buying materials for [teaching] prisms and other topics in the future. (Interview, T3)

Regarding the parent-related factors, most teachers made adaptations in relation to the support of parents for students. The level of parental involvement and support in the education of their students affected the adaptations of the participants in the time allocated for specific topics or learning outcomes and the quality of the activities they conducted.

> …but textbooks are inadequate for the child, and parents do not buy additional resources. They see spending on the child's education as unnecessary. Although a few parents may buy them, I cannot advance with just those books for some students, which disrupts the classroom environment as others fall behind. (Interview, T5)

Some teachers made adaptations due to the socio-economic status of their students' families and communication issues with parents. Additionally, challenges such as communication issues with the families of foreign students, students experiencing adaptation problems, lack of family integrity, various family issues, and the quality of communication between parents and teachers led to adaptations in topics or targeted learning outcomes in the classes held by the participants.

Regarding the curriculum-related factors affecting the adaptations made to the designed and implemented lesson plans of the participants, teachers made adaptations due to the alignment of the textbook with the curriculum, the structure of the mathematics curriculum, and the lack of suitability of the curriculum for student readiness. The findings showed that

because the curriculum was not suitable for the levels of students and as there was a lack of alignment between the textbook and the curriculum, the participants supported their teaching processes using various additional resources, revisited the targeted learning outcomes of the previous year due to gaps in the structure of the curriculum, or placed learning outcomes in different learning areas that they believed in which their students would understand better. Some participants noted that the structure of the mathematics curriculum progressed more smoothly compared to the curricula of other subjects. Frequent adaptations made to extend content were related to the grasping speed of students regarding the targeted learning outcomes foreseen in the curriculum, as well as the approaches of the participants to learning and teaching, and the spiral nature of the targeted learning outcomes or the characteristics of the topic.

Discussion

The findings reveal a notable discrepancy between the stated efforts of the participants to align their designed lesson plans with the official curriculum and the way this alignment was actually established in practice. Although the participants reported in the interviews that they tried to adhere to the curriculum, their responses in Daily Practice Evaluation Forms indicated that this adherence was shaped not through direct engagement with the official curriculum, but rather indirectly through textbooks and other supplementary materials. Similarly, Güzel Yüce (2022) and An (2020) found that teachers tried to adhere to the official curriculum by following the order of topics and objectives in the textbooks. While following the textbook and diverse resources is a positive behavior in terms of commitment to the goals and content of the mathematics curriculum, it does not guarantee that teachers will perform teaching and assessments in line with the cognitive processes required by the objectives (Tarr et al., 2006).

It was observed that the participants' engagement was not with the primary curriculum document itself, but rather with its interpretation as presented in textbooks and supplementary resources. This reveals a prevalent behavioral pattern where the textbook is treated as a substitute for, rather than a guide to, the official curriculum. Teachers may follow the sequence of topics and objectives presented in the textbook, yet often remain unaware of the broader philosophical underpinnings, overarching goals, and specific cognitive processes mandated by the actual curriculum document. Therefore, our finding is not merely that teachers use textbooks—a point also noted in studies by Güzel Yüce (2022) and An (2020). Rather, we highlight that this reliance often becomes an exclusive one, effectively rendering the textbook the de facto curriculum. This disconnect is crucial, as it explains why adaptations often fail to align with the curriculum's intended cognitive complexity, a point further elaborated by Tarr et al. (2006). This is because, as found in this study, even though teachers frequently use the curriculum and express opinions that they adhere to it, their awareness of adapting and adhering to the curriculum in the teaching process is limited. This leads to adaptations that are limited and of low efficiency (Dikbayır, 2018; Karaca, 2022; Tan Şişman, 2021). As a result, as seen in this study and various others, teachers often make adjustments in learning-teaching processes and assessment components that do not align with the cognitive processes required by the objectives or the specifics stated in the curriculum (Avcu & Haser, 2020; Dikbayır & Bümen, 2016; Kara et al., 2017; Karabacak, 2018; Karaca, 2022; Kurz et al., 2009; Miller Day et al., 2013; Seitz, 2017; Uludağ Çınar, 2023). Hence, it can be stated that teachers generally act

more autonomously in making adaptations because the official curriculum contains more general expressions about learning, teaching, and assessment elements than about specific goals and content.

Our finding that teachers exhibit greater autonomy in teaching processes and assessment rather than in content planning is an anticipated outcome within Türkiye's centralized curriculum system. However, this study moves beyond simply stating this reality to explore how teachers strategically navigate their practice within these systemic constraints. The adaptations observed in this process are not merely isolated pedagogical choices. They represent a delicate balancing act in response to powerful institutional and socio-political pressures. For instance, the institutional pressure from school administrations and the socio-political emphasis on high-stakes centralized exams often compel teachers to prioritize content coverage over in-depth learning. This context explains why adaptations like 'superficial treatment' are common. They allow teachers to meet the formal requirement of 'finishing the book' while creating space for other topics they deem more important. Similarly, a teacher's decision to use an additional web-based application (an adaptation in process) can be interpreted as an act of reclaiming professional autonomy in a system that rigidly defines content. Thus, by examining these micro-level classroom adaptations, our study sheds light on the macro-level discrepancies between centrally mandated policies and the practical realities of teaching, as well as between the demand for curriculum fidelity and the enduring professional drive for autonomy.

Most participants in this study made adaptations in their designed lesson plans concerning the official curriculum in the form of extension, followed by omission, and finally, replacement or revision. Bümen and Holmqvist (2022) found that teachers most frequently made adaptations in the form of extension, followed by replacement or revision and omission. In contrast, Akbulut Taş (2022) reported that teachers frequently made adaptations referred to as replacement. Differences in findings obtained across various studies may be attributed to variations in student and teacher characteristics.

The findings also showed that teachers benefited from supplementary resources and web-based applications. Most frequent adaptations involved using supplementary resources and web-based applications, followed by incorporating topics and objectives from different grade levels, relating content to other subjects, and conducting additional activities. Various studies have indicated that teachers frequently use additional activities and resources to support teaching and allocate more time to certain subjects (Kasap Erdal et al., 2023; Miller Day et al., 2013; Muzata & Mahlo, 2019; Otukile Mongwaketse et al., 2016; Ünsal & Çetin, 2019; Yazıcılar, 2016; Yazıcılar & Bümen, 2019). It is noted that teachers prefer various commercial applications over utilizing the (EBA) in Türkiye. This suggests that teachers incorporate various extracurricular activities through the use of non-standard applications. These findings suggest that the use of web-based applications should be monitored, and their contributions to the teaching process should be effectively examined.

In the context of omission, most participants in this study made adaptations in the form of superficial discussions of topics and objectives, while less than half of them skipped the use of textbooks or omitted certain topics and objectives. Various studies have shown that teachers adapt by not using textbooks, partially addressing content, and downplaying objectives to lower class levels (Kasap Erdal et al., 2023; Li & Harfitt, 2017; Miller Day et al., 2013). This may be due to the low level of curriculum awareness among the participants and factors such as

their desire for greater autonomy. Indeed, some studies have shown that the awareness and autonomy of teachers regarding curriculum adaptations have various effects on the adaptations they make (Tokgöz Can & Bümen, 2021; Yazıcılar Nalbantoğlu, 2021). A closer examination of the omission pattern reveals a critical distinction between superficially discussing topics and omitting them entirely. This distinction is not arbitrary. Rather, it highlights the nuanced and highly contextual nature of teachers' practical decision-making. Superficial treatment often appears to be a pragmatic compromise. Teachers resort to this strategy for topics they perceive as mandatory but for which they lack sufficient time or believe their students are not ready for in-depth engagement. It is a way of acknowledging the official curriculum while yielding to classroom realities. In contrast, outright omission signals a more definitive and autonomous pedagogical judgment. This adaptation is typically made when teachers deem a topic irrelevant to the immediate needs of their students, redundant with other material, or simply unteachable due to a lack of resources or extreme time constraints.

In this study, within the scope of the replacement or revision pattern, fewer than half of the participants used different teaching processes than required by the objectives of the curriculum or placed the objectives under different learning areas. Previous studies have suggested similar adaptation patterns, such as changing the amount of time allocated to the subject or using different resources and materials (Miller Day et al., 2013; Yazıcılar & Bümen, 2019). It can be argued that in this study, the participants were reluctant to make reorganizations in their lesson plans during the planning process. However, in some studies, it was found that teachers frequently resorted to adaptations in the form of reorganization (Akbulut Taş, 2022; Muzata & Mahlo, 2019). This finding may indicate potential challenges in the literacy levels of the participants in the curriculum. However, explaining this phenomenon solely through curriculum literacy might be insufficient. A more holistic perspective is offered by the concept of Pedagogical Design Capacity (PDC), which refers to a teacher's ability to perceive and mobilize existing resources to design instructional experiences (Brown, 2009). From this viewpoint, the tendency of teachers to adapt the curriculum might not just signal a lack of knowledge, but rather an active, albeit sometimes inaccurate, attempt to design learning environments they deem more suitable for their students. For instance, reorganizing objectives could be seen as an exercise of their PDC, where they repurpose curricular elements based on their own pedagogical reasoning. While our study was not designed to measure PDC directly, this framework provides a valuable lens for interpreting our findings cautiously, suggesting that teacher adaptations are complex acts of design, not merely errors in fidelity.

It was found that most participants did not adhere to the lesson plans they designed and made more frequent adaptations in their implemented lesson plans than in their designed lesson plans. This situation shows that teachers are influenced by different variables both during the lesson plan design process and the implementation of the designed lesson plan. A teacher who lacks sufficient information about the student group during the lesson plan design process may create a plan unsuitable for the group, and upon facing difficulties in implementing this plan in the classroom, they may be forced to make alterations. Similarly, this influence can be positive (e.g., adjusting the plan according to student reactions, briefly covering topics once comprehension is ensured) or negative (e.g., forming the perception that "students will not understand anyway" or being affected by unforeseen classroom events like external noise, temperature issues, the teacher's fatigue, or incidents like a student having a nosebleed). These factors can also lead to both beneficial and detrimental impacts on the

delivery of classes (Güzel Yüce, 2022). Various studies have also revealed that teachers do not adhere strictly to their designed lesson plans but make many adjustments to their plans (Aykaç & Ulubey, 2012; Öztürk, 2012; Štolcová et al., 2023; Yazıcılar, 2016).

When examining the extensions made between the implemented and designed lesson plans by classroom teachers, it was found that most participants included additional activities and topics or objectives from different grade levels to reinforce teaching. Apart from these observed adaptation patterns, less than half of the participants also made adaptations such as relating content to other subjects. Moreover, in examining the frequencies of adaptations made within the scope of extension, it was found that the most frequent adaptations involved conducting additional activities, including topics or objectives from different grade levels, and relating content to other subjects. Findings from related studies have indicated that, similar to these findings, teachers often include additional activities to enhance the understanding of the topic and promote further learning (Kasap Erdal et al., 2023; Li & Harfitt, 2017; Yazıcılar, 2016).

In the context of the adaptations made between the implemented and designed plans by the participants within the scope of the replacement or revision pattern, it was determined that half of the participants used different methods and materials than planned, while fewer than half postponed planned activities or used time allocated to other subjects. The use of different methods than planned by the participants was interpreted as that they designed methods that were not suitable for the classroom dynamics, but they felt the need to make changes when they thought their students would have difficulties during the in-class implementation process. This may suggest that the participants were not determined, and they may not have been familiar with the levels of their students, the facilities of their classrooms, or even themselves. Teachers may also fail to implement the materials they have designed beforehand for various reasons, primarily including economic constraints (Batmaz, 2017).

Within the scope of the omission pattern, the adaptations made by the participants between their implemented and designed lesson plans involved the inclusion of fewer activities than planned in the designed plans. Although the participants seemed hesitant about omission during the interviews, it was revealed that most could not fully implement their designed curriculum due to different factors during the process of teaching their classes.

Among the factors influencing the adaptations made by the participants of this study between their designed and implemented lesson plans, the most prominent factors were teacher-related factors, followed by student-related, school-related, curriculum-related, and parent-related factors. Despite the significant effects of these factors on the curriculum adaptations of the participants, no findings related to regional and centralized exam-related factors affecting their curriculum adaptations were encountered in this study. This could be due to the fact that the participants worked at the primary school level, and no significant regional factors affecting curriculum adaptations were observed.

The teacher-related factors influencing the adaptations between their designed and implemented lesson plans included the learning and teaching approach they held as a significant factor with an impact on their adaptations. Since teachers were inclined to adopt student-centered teaching processes, they made various adaptations based on the comprehension and learning speed of their students; they skipped over some topics, or they expanded the official curriculum's suggested class durations and content scope for further

learning. Previous studies have also demonstrated that the learning and teaching approaches of teachers are some of the influential factors in their curriculum adaptation processes (Baş & Şentürk, 2019; Gelmez Burakgazi, 2020; İlhan & Bümen, 2023; Li & Harfitt, 2017; Meidl & Meidl, 2011; Öztürk Akar, 2005; Tan Şişman, 2021). Similar studies have also indicated that the attitudes of teachers toward the curriculum and their competencies related to curriculum literacy are the most frequently encountered teacher-related factors in curriculum adaptation processes (Aykaç & Ulubey, 2012; Bilgiç & Batu, 2023; Dikbayır, 2018; Güzel Yüce, 2022; İlhan & Bümen, 2023; Li & Harfitt, 2017; McCarthey & Woodard, 2018; Muzata & Mahlo, 2019; Roehrig et al., 2007; Tekbıyık & Akdeniz, 2008). Within the scope of this study, another factor affecting the curriculum adaptations was classroom management skills. Teachers made various adjustments to their designed lesson plans due to sudden developments during their classes. Some effectively coped with these sudden situations and managed to implement their designed lesson plans efficiently, while others postponed the activities or conducted their classes in a more superficial manner.

Considering the student-related factors influencing the adaptations made by the teachers between their designed and implemented lesson plans, most made adaptations in line with the cognitive characteristics of their students. The cognitive preparedness of students, their attitudes toward mathematics, their participation in the classroom, learning difficulties, attention deficits, and self-discipline had a significant impact on the curriculum adaptations of the participants. It was considered that the participants attempted to implement their plans with an attitude focusing on lecturing and expecting anyone who was supposed to learn to learn. Other studies have also pointed out that the cognitive and affective characteristics of students are frequently encountered factors influencing the adaptation processes of teachers (Bümen & Yazıcılar, 2020; Karaca, 2022; Kurz et al., 2009; Li & Harfitt, 2017; McCarthey & Woodard, 2018; Miller Day et al., 2013; Molla & Lee, 2012; Ünsal & Çetin, 2019; Yazıcılar, 2016; Yazıcılar & Bümen, 2019).

School-related factors influencing the adaptations included the physical structure of the school in most cases. Teachers faced challenges in procuring materials for their classes, and therefore, they tried to compensate for this deficiency by making adaptations within their means. While some took precautions in this process, others postponed activities or conducted their classes more superficially through direct instruction. The results of previous studies have suggested that the physical infrastructure and facilities of a school are among the factors influencing the curriculum implementation processes of teachers (Arslan Çelik, 2020; Dikbayır, 2018; Gelmez Burakgazi, 2020; Gürbüz, 2020; İlhan, 2022; Öztürk Akar, 2005; Ünsal & Çetin, 2019).

The parent-related factors influencing the adaptations included the support provided by parents to their students. Parental support affected the time allocated to a particular topic or objective, as well as the quality and efficiency of the activities conducted. In addition to parental support. About half of the participants made adaptations due to the socio-economic structure of their students' families, while fewer than half made some adaptations due to factors such as communication between parents and teachers. Furthermore, due to the presence of foreign students in their classes, the participants experienced communication and adaptation problems with both parents and students, and they made various adjustments, such as simplifying or enhancing the topic or objective, due to issues related to family integrity, some

family problems, and the quality of their communication with parents. Although not frequently encountered in this study, relevant studies showed that the socio-economic levels of parents are among the influential factors on the adherence of teachers to curricula, as well as their adaptations (Güleş, 2022; Özbaş, 2018).

In the context of curriculum-related factors influencing the adaptations between their designed and implemented lesson plans, teachers made adaptations due to factors such as textbook-curriculum alignment, the structure of the mathematics curriculum, and the alignment between the curriculum and the preparedness levels of students. the participants adapted the curriculum because they did not find the official curriculum suitable for the levels of students. They supported teaching with different supplementary resources due to inconsistencies between the textbook and the curriculum. They made adaptations such as revising objectives from previous years or reorganizing objectives under different learning areas and changing their sequence, due to various gaps in the structure of the curriculum. It has been reported that teachers experience problems in implementing official curricula or make adaptations for the reasons including but not limited to those mentioned above (Akbulut Taş, 2022; Arslan Çelik, 2020; Asri, 2018; Bümen & Yazıcılar, 2020; Dikbayır & Bümen, 2016; Döş et al., 2017; Dursun, 2022; Gelmez Burakgazi, 2020; Hacısalihoğlu Karadeniz, 2011; İlhan, 2022; İlhan & Bümen, 2023; Kaya et al., 2012; Li & Harfitt, 2017; Öztürk, 2012; Tan Şişman, 2021; Tokgöz Can & Bümen, 2021; Turan Özpolat, 2015; Uludağ Çınar, 2023; Yeşilpınar Uyar & Eti, 2022).

Conclusion and Implications

The main conclusion of this study is that while teachers express a strong commitment to the national curriculum, their adherence is mediated almost exclusively through textbooks. However, the textbook serves not merely as a resource but as the de facto curriculum. This commitment may create a disconnect; while the sequence of topics is maintained, the deeper philosophical goals and specific cognitive processes mandated by the official curriculum are often overlooked.

The findings demonstrate that curriculum adaptation is not a static but a dynamic process that evolves from the planning to classroom implementation. In the design phase, adaptations are largely shaped by the availability of resources and the textbook's structure. However, during implementation, the implemented curriculum diverges significantly from the designed. Teachers frequently engage in extension, incorporating supplementary materials and web-based applications as a primary form of adaptation. This suggests that teachers are actively seeking to bridge the gap between curriculum goals and the concrete realities of their students' needs.

These adaptations are not arbitrary deviations but are sophisticated responses to a complex ecology of factors. Teacher-related factors, student-related factors, and school-related factors collectively shape the instructional process. The discrepancy found between designed and implemented lesson plans underscores that teachers are often forced to negotiate between the rigid demands of a centralized system and the immediate pedagogical needs of their students.

Several implications for educational policy and practice emerge. First, shift teacher professional development from textbook-centered training to curriculum literacy, enabling teachers to understand and utilize the curriculum document as their primary guide. This process also enables the implications to support teachers in developing pedagogical design capacity by focusing on designing for flexibility, equipping them to create adaptable lesson plans that cater to student variability and contextual constraints. On the other hand, according to the ministry several improvements on curriculum materials are necessary. Rigorously scrutinize the alignment between textbooks and the official curriculum, ensuring that textbooks reflect the curriculum's pedagogical approach and cognitive complexity. Thus, enable the curriculum to be understood by teachers. Educational technologies are also emerging and empowering in today's classroom settings. Educational technologies are increasingly emerging as transformative tools that empower both teachers and students in today's classroom settings. Therefore, it is essential for teachers not only to understand the pedagogical potential of these applications but also to integrate them effectively into their instructional practices. By doing so, teachers can enhance student engagement, personalize learning experiences, and foster the development of 21st-century skills. Moreover, the ability to critically select and utilize appropriate digital resources enables teachers to bridge the gap between curriculum goals and the diverse needs of their students, ultimately contributing to more effective and meaningful learning outcomes.

Author Contributions

Berkay Kılıç: Conceptualization, literature review, methodology, data collection, data analysis, writing and editing original draft, validation and interpretation.

Dilşat Peker Ünal: Conceptualization, data analysis, writing and editing original draft, validation and interpretation.

Declarations

Ethical Approval and Informed Consent

This study was approved by Yozgat Bozok University Institutional Ethical Review Board. All procedures in this study were conducted in accordance with Yozgat Bozok University Institutional Review Board's approved protocols. Written informed consent was obtained from the participants for their anonymized information to be published in this article.

Supplemental Material

There are no supplemental materials for this article.

Disclosure of AI Use

Google Gemini generative artificial intelligence tool was utilized for translation and proofreading in the preparation of this article.

References

Akbulut Taş, M. (2022). Dezavantajlı ortaokullarda çalışan öğretmenlerin program uyarlama çabalarının incelenmesi [An investigation of curriculum adaptation efforts of teachers working in disadvantaged secondary schools.] *Pegem Journal of Education & Instruction*, *12*(1), 10-24. https://doi.org/10.47750/pegegog.12.01.02

An, F. (2020). *İngilizce öğretmenlerinin program uyumluluğunu sağlama durumlarının incelenmesi (An investigation of the cases of english teachers to ensure program alignment)* (Thesis No: *616652*)[Gaziantep University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Arslan Çelik, F. M. (2020). *Ortaokul ingilizce öğretmenlerinin öğretim programına bağlılıklarının incelenmesi (An investigation of secondary school english teachers' curriculum fidelity).* (Thesis No: 646523) [Hacettepe University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Asri, S. (2018). Ortaöğretim din kültürü ve ahlak bilgisi öğretiminde öğretim programı ders kitabı uyumu. *Türkiye Din Eğitimi Araştırmaları Dergisi*, 5, 9-50. https://dergipark.org.tr/en/pub/tudear/issue/38687/449608

Avcu, R., & Haser, Ç. (2020). Matematik öğretmenlerinin çözümlü örneklerinin ve yazılı sınav sorularının öğretim programında yer alan kazanımlarla uyumunun belirlenmesi. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi* *20*(1), 20-41. https://doi.org/10.17240/aibuefd.2020.20.52925-505016

Aykaç, N., & Ulubey, Ö. (2012). Öğretmen adaylarının ilköğretim programının uygulanma düzeyine ilişkin görüşleri [Pre-service teachers' opinions about the application level of elementary school program]. *Journal of Faculty of Educational Sciences*, *45*(1), 63-82. https://doi.org/10.1501/Egifak_0000001236

Baş, G., & Şentürk, C. (2019). Teaching-learning conceptions and curriculum fidelity: A relational research [Öğretim-öğrenme kavramları ve program sadakati: ilişkisel bir araştırma]. *International Journal of Curriculum and Instruction*, *11*(2), 163-180. https://eric.ed.gov/?id=EJ1232775

Batmaz, G. (2017). *Sınıf öğretmenlerinin kaynaştırma öğrencilerine yönelik yaptıkları öğretimsel düzenlemeler (Instructional arrangements made by primary school teachers for inclusion students).* (Thesis No: 454679) [Pamukkale University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Bilgiç, E., & Batu, E. S. (2023). Kaynaştırma uygulamalarında gerçekleştirilebilecek uyarlamalar eğitiminin sınıf öğretmenlerinin uyarlamaların önemine ilişkin görüşlerine etkisi [The effect of ınstructional adaptations training within ınclusive practices on classroom teachers' opinions about the ımportance of ınstructional adaptations]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, *24*(3), 401-418. https://doi.org/10.21565/OZELEGITIMDERGISI.1116380

Brown, M. W. (2009). *The teacher-tool relationship: Theorizing the design and use of curriculum materials.* In J. T. Remillard, B. A. Herbel-Eisenmann, & G. M. Lloyd (Eds.), *Mathematics*

teachers at work: Connecting curriculum materials and classroom instruction (pp. 17–36). Routledge.

Bümen, N. T., Çakar, E., & Yıldız, D. G. (2014). Türkiye'de öğretim programına bağlılık ve bağlılığı etkileyen etkenler [Curriculum fidelity and factors affecting fidelity in the Turkish context]. *Educational Sciences: Theory and Practice, 14*(1), 219-228. https://dergipark.org.tr/en/download/article-file/1086542

Bümen, N. T., & Holmqvist, M. (2022). Teachers' sense-making and adapting of the national curriculum: A multiple case study in Turkish and Swedish contexts. *Journal of Curriculum Studies*, *54*(6), 832-851.https://doi.org/10.1080/00220272.2022.2121178

Bümen, N. T., & Yazıcılar, Ü. (2020). Öğretmenlerin öğretim programı uyarlamaları üzerine bir durum çalışması: Devlet ve özel lise farklılıkları. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, *40*(1), 183-224. https://doi.org/10.17152/GEFAD.595058

Creswell, J. W. (2013). *Nitel araştırma yöntemleri: Beş yaklaşıma göre nitel araştırma ve araştırma deseni* (M. Bütün, S. B. Demir, Ed. & Trans..;3rd ed.). Siyasal Kitabevi.

Creswell, J. W., & Plano Clark, V. (2014). *Karma yöntem araştırmaları tasarımı ve yürütülmesi* (Y. Dede & S. B. Demir, Ed.& Trans..; 4th. ed.). Anı Yayıncılık.

Dikbayır, A. (2018). *Tasarlanan, uygulanan ve ölçülen lise matematik programlarındaki uyumun incelenmesi (Investigation of the alignment between designed, taught and tested high school mathematics curriculum).* (Thesis No: 528683) [Ege University, Doctoral Dissertation]. Turkish Council of Higher Education Theses Center.

Dikbayır, A., & Bümen, N. T. (2016). Dokuzuncu sınıf matematik dersi öğretim programına bağlılığın incelenmesi. *Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi*, *6*(11), 17-38. https://search.trdizin.gov.tr/tr/yayin/detay/208162/dokuzuncu-sinif-matematik-dersi-ogretim-programina-bagliligin-incelenmesi

Döş, B., Bay, E., Kahramanoğlu, R., & Özpolat, E. T. (2017). Programa bağlılığı etkileyen faktörlerin analizi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, *43*, 110-137. https://doi.org/10.21764/efd.02208

Drake, C. and Sherin, M. G. (2006). Practicing change: curriculum adaptation and teacher narrative in the context of mathematics education reform. *Curriculum Inquiry, 36*(2), 153-187. https://doi.org/10.1111/j.1467-873x.2006.00351.x

Dursun, A. N. (2022). *6.sınıf sosyal bilgiler dersi EBA video ve sorularının sosyal bilgiler programıyla uyumunun incelenmesi (Examining the compliance of 6th grade social studies lesson EBA videos and questions in with the social studies curriculum).* (Thesis No: 753108) [Necmettin Erbakan University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Gelmez Burakgazi, S. (2020). Curriculum adaptation and fidelity: A qualitative study on elementary teachers' classroom practices. *Issues in Educational Research*, *30*(3),920-942. https://search.informit.org/doi/10.3316/informit.465246677972448

Glatthorn, A. A. (2000). *The principal as curriculum leader: Shaping what is taught and tested* (2nd ed.). Corwin Press.

Güleş, E. (2022). *İlkokul ve ortaokul öğretmenlerinin program okuryazarlıkları ve öğretim programına bağlılıklarının incelenmesi (Examination of primary and secondary teachers' program literacy and commitment to the curriculum).* (Thesis No: 715738) [Nevşehir Hacı Bektaş Veli University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Gürbüz, Ç. (2020). *Müzik öğretmenlerinin müzik dersi öğretim programına bağlılık düzeylerinin incelenmesi (Analysis of the levels of commitment of music teachers to the music lesson teaching program).* (Thesis No: 654835) [Gaziantep University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Güzel Yüce, S. (2022). Öğretim programına bağlılık ve öğretim programını uyarlama ikilemini aşmak: Bir öğretmenin öğretim programını kullanma modeli. *Mustafa Kemal Üniversitesi Eğitim Fakültesi Dergisi*, *6*(9), 1-21. https://dergipark.org.tr/tr/pub/mkuefder/issue/70958/1037063

Hacısalihoğlu Karadeniz, M. (2011). *Okul öncesi öğretmenlerinin sınıf içi matematik uygulamalarının okul öncesi eğitim programına uyumluluğu (Coherency between pre-school teachers? In-class mathematics applications and pre-school educational curriculum).* (Thesis No: 300411) [Karadeniz Technical University, Doctoral Dissertation]. Turkish Council of Higher Education Theses Center.

Hale, J. A. (2008). *A guide to curriculum mapping: Planning, implementing, and sustaining the process*. Corwin Press.

İlhan, B. (2022). *Farklı branşlardaki ortaokul öğretmenlerinin öğretim programını sınıfa uyarlama sürecinin incelenmesi (Investigating the curriculum adaptation process of the secondary school subject teachers).* (Thesis No: 736689) [Ege University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

İlhan, B., & Bumen, N. (2023). Ortaokul öğretmenlerinin öğretim programı uyarlamaları: örüntüler, nedenler ve sonuçlar [Secondary school teachers' curriculum adaptations: patterns, causes,and consequences]. *Türk Eğitim Bilimleri Dergisi*, *21*(1), 303-334. https://doi.org/10.37217/tebd.1181074

Kara, K., Karakoç, B., Yıldırım, İ., & Bay, E. (2017). Sekizinci sınıf matematik öğretiminde teori ve uygulama bağlamında program uyumluluğunun incelenmesi. *Harran Education Journal*, *2*(1), 26-40. https://doi.org/10.22596/2017.0201.26.40

Karabacak, E. (2018). *İlkokul resmi İngilizce öğretim programı ile uygulamadaki program arasındaki uyumun incelenmesi (Analyzing the alignment between the primary school official English curriculum and the taught curriculum).* (Thesis No: 523713) [Anadolu University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Karaca, E. E. (2022). *Posner'ın program türlerine göre ortaokul İngilizce dersi öğretim programına ilişkin öğretmen görüş ve deneyimleri (Teachers' views and experiences on middle school English language teaching curriculum according to Posner's curriculum types).* (Thesis No: 719711) [Hacettepe University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Karakuyu, A. (2023). The contribution of teachers' curriculum literacy on their curriculum fidelity: Curriculum literacy - curriculum fidelity. *International Journal of Curriculum and Instruction*, *15*(3), 1785-1800. https://ijci.net/index.php/IJCI/article/view/1381/673

Kasap Erdal, D., Yazgan Sağ, G., & Argün, Z. (2023). Kaynaştırma sınıflarında öğretim ile ilgili uygulamaların incelenmesi: Ortaokul matematik öğretmenleri örneği [Examination of teaching practices in inclusive classrooms: The case of middle school mathematics teachers]. *Ankara University Faculty of Educational Sciences Journal of Special Education*, *24*(1), 1-17. https://doi.org/10.21565/OZELEGITIMDERGISI.947139

Kaya, E., Çetin, P. S., & Yıldırım, A. (2012). Merkeziyetçi öğretim programlarının sınıf-içi uygulamaya dönüştürülmesi: Öğretmen deneyimlerinin analizi [Transformation of centralized curriculum into classroom practice: An analysis of teachers' experiences]. *International Journal of Curriculum and Instructional Studies (IJOCIS)*, *2*(3), 103-114. https://hdl.handle.net/11511/73897

Koç, S. (2022). *Özel eğitim öğretmenlerinin program uyarlamaları (Program adaptations of special education teachers)*. (Thesis No: 755847) [Kahramanmaraş Sütçü İmam University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Kurz, A., Elliott, S. N., Wehby, J. H., & Smithson, J. L. (2009). Alignment of the intended, planned, and enacted curriculum in general and special Education and its relation to student achievement. *The Journal of Special Education,* 44 (3), 131-145. https://doi.org/10.1177/0022466909341196

Li, Z., & Harfitt, G. J. (2017). An examination of language teachers' enactment of curriculum materials in the context of a centralised curriculum. *Pedagogy, Culture and Society*, *25*(3), 403-416. https://doi.org/10.1080/14681366.2016.1270987

McCarthey, S. J., & Woodard, R. (2018). Faithfully following, adapting, or rejecting mandated curriculum: Teachers' curricular enactments in elementary writing instruction. *Pedagogies: An International Journal*, *13*(1), 56-80. https://doi.org/10.1080/1554480X.2017.1376672

Meidl, T., & Meidl, C. (2011). Curriculum integration and adaptation: Individualizing pedagogy for linguistically and culturally diverse students. *Current Issues in Education*, *14*(1). https://cie.asu.edu/ojs/index.php/cieatasu/article/view/579

Ministry of National Education. (2018). *Matematik dersi öğretim programı (İlkokul ve ortaokul 1, 2, 3, 4, 5, 6, 7 ve 8. sınıflar)* [Mathematics curriculum (Primary and middle school grades 1, 2, 3, 4, 5, 6, 7, and 8)]. https://mufredat.meb.gov.tr/Dosyalar/201813017165445-MATEMAT%C4%B0K%20%C3%96%C4%9ERET%C4%B0M%20PROGRAMI%202018v.pdf

Miller Day, M., Pettigrew, J., Hecht, M. L., Shin, Y. J., Graham, J., & Krieger, J. (2013). How prevention curricula are taught under real-world conditions: Types of and reasons for teacher curriculum adaptations. *Health Education*, *113*(4), 324-344. https://doi.org/10.1108/09654281311329259/FULL/XML

Molla, A. S., & Lee, Y.J. (2012). How much variation is acceptable in adapting a curriculum? *Journal of Education Research*, *6*(1), 1-34.

https://openurl.ebsco.com/EPDB%3Agcd%3A15%3A668927/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Agcd%3A85445636&crl=c&link_origin=scholar.google.com.tr

Muzata, K. K., & Mahlo, D. (2019). Teachers' knowledge of curriculum adaptation and adaptation strategies for learners with special educational needs in Zambia. *Journal of New Vision in Educational Research*, *1*(1), 17-35. https://gzuscholar.gzu.ac.zw/index.php/JoNVER/article/view/28

OECD. (2023). Education at a glance 2023: OECD indicators. https://doi.org/10.1787/e13bef63-en

Otukile Mongwaketse, M., Mangope, B., & Kuyini, A. B. (2016). Teachers' understandings of curriculum adaptations for learners with learning difficulties in primary schools in Botswana: Issues and challenges of inclusive education. *Journal of Research in Special Educational Needs*, *16*(3), 169-177. https://doi.org/10.1111/1471-3802.12069

Özbaş, M. (2018). Dezavantajlı sosyolojik tabakalarda zorunlu eğitim sürecini etkileyen değişkenler [The variables affecting the compulsory education process in disadvantageous sociologic classes]. *Kastamonu Eğitim Dergisi*, *26*(4), 1143-1154. https://doi.org/10.24106/kefdergi.434262

Öztürk Akar, E. (2005). Lise biyoloji dersi öğretim programının uygulanmasında okul düzeyinde görülen farklılıklar. *Eğitim Bilimleri ve Uygulama*, *4*(7), 51-67. https://ebuline.com/pdfs/7Sayi/7_4.pdf

Öztürk, İ. H. (2012). Öğretimin planlanmasında öğretmenin rolü ve özerkliği: Ortaöğretim tarih öğretmenlerinin yıllık plan hazırlama ve uygulama örneği. *Kuram ve Uygulamada Eğitim Bilimleri*, *12*(1), 271-299. https://www.academia.edu/download/37375349/kuyeb.pdf

Roehrig, G. H., Kruse, R. A., & Kern, A. (2007). Teacher and school characteristics and their influence on curriculum implementation. *Journal of Research in Science Teaching*, *44*(7), 883-907. https://doi.org/10.1002/TEA.20180

Seitz, P. (2017). Curriculum alignment among the intended, enacted, and assessed curricula for grade 9 mathematics. *Journal of the Canadian Association for Curriculum Studies*, *15*(1), 72-94. https://doi.org/10.25071/1916-4467.40286

Štolcová, K., Hanus, M., & Řezníčková, D. (2023). Geography curriculum fidelity in map-skills development: Examining teachers' personal concepts, lesson objectives, and observed lessons. *Geografie*, *128*(4), 397-418. https://doi.org/10.37040/geografie.2023.016

Tan-Şişman, G. (2021). Öğretmenlerin Öğretim programına yönelik görüşleri ve deneyimleri. *In The Ninth International Congress on Curriculum and Instruction Conference Proceedings* (p.92-104) https://icci-epok.ege.edu.tr/files/icci-epok/icerik/Icci_Epok_2021_Proceedings.pdf#page=94

Tarr, J. E., Chávez, Ó., Reys, R. E., & Reys, B. J. (2006). From the written to the enacted curricula: The intermediary role of middle school mathematics teachers in shaping students' opportunity to learn. *School Science and Mathematics, 106*(4), 191-201. https://doi.org/10.1111/J.1949-8594.2006.TB18075.X

Tekbıyık, A., & Akdeniz, A. R. (2008). İlköğretim fen ve teknoloji dersi öğretim programını kabullenmeye ve uygulamaya yönelik öğretmen görüşleri. *Necatibey Eğitim Fakültesi Elektronik Fen ve Matematik Eğitimi Dergisi*, *2*(2), 23-37. https://dergipark.org.tr/en/pub/balikesirnef/issue/3367/46487

Tokgöz Can, M., & Bümen, N. T. (2021). Turkish teachers' autonomy in using and adapting curriculum: A mixed methods study. *Issues in Educational Research*, *31*(4), 1270-1292. https://www.iier.org.au/iier31/tokgoz-can.pdf

Turan Özpolat, E. (2015). Program uyumluluğu ve program uyumluluğunu etkileyen faktörlere yönelik literatür taraması [A literature study of curriculum alignment and the factors affecting to the curriculum alignment] . *Route Educational and Social Science Journal*, *2*, 200-200. https://doi.org/10.17121/ressjournal.444

Uludağ Çınar, E. (2023). *Ortaokul öğretmenlerinin öğretim programına bağlılıklarını yordayan değişkenlerin incelenmesi (An investigation of the variables predicting secondary school teachers' curriculum fidelity).* (Thesis No: 762266) [Sivas Cumhuriyet University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Ünver, G. (2021). Program çalışmaları için öğretmen eğitimi. *Öğretmen Eğitimi ve Öğretim, 2*(2), 30-55. https://doi.org/10.55661/jnate.952088

Ünsal, S., & Çetin, A. (2019). Özel okul ve devlet okulunda görev yapmış sınıf öğretmenlerinin öğretim programlarını uygulamada karşılaştıkları farklılıklar [Differences encountered by classroom teachers who worked at private and state schools in the implementation of the curriculum] . *Kastamonu Eğitim Dergisi*, *27*(4), 1541-1551. https://doi.org/10.24106/kefdergi.3131

Yazıcılar Nalbantoğlu, Ü. (2021). *Öğretim programını sınıfa uyarlama becerilerine yönelik bir mesleki gelişim programının öğretmenlere katkılarının incelenmesi (Examining the contributions of a professional development program to teachers in adapting the curriculum to the classroom).* (Thesis No: 695410) [Ege University, Doctoral Dissertation]. Turkish Council of Higher Education Theses Center.

Yazıcılar, Ü. (2016). *Öğretmenlerin matematik dersi öğretim programını uyarlama sürecinin incelenmesi (Investigation of the teachers' adaptation process of the mathematics curricula).* Thesis No: 428064) [Ege University, Master's Thesis]. Turkish Council of Higher Education Theses Center.

Yazıcılar, Ü., & Bümen, N. (2019). Crossing over the brick wall: Adapting the curriculum as a way out. *Issues in Educational Research*, *29*, 583-609. https://www.iier.org.au/iier29/yazicilar.pdf

Yeşilpınar Uyar, M., & Eti, İ. (2022). Curriculum fidelity of Turkish preschool teachers in school-based practices. *Education 3-13 International Journal of Primary, Elementary and Early Years Education, 51*(5), 820–835. https://doi.org/10.1080/03004279.2021.2024867

Yıldırım, A., & Şimşek, H. (2021). *Sosyal bilimlerde nitel araştırma yöntemleri* (12th ed.). Seçkin Yayıncılık.

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TÜRKÇE GENİŞ ÖZET

Sınıf Öğretmenlerinin Program Uyarlamaları: İlkokul Matematik Dersi Öğretim Programına İlişkin Bir Durum Çalışması

Giriş

Eğitim programlarının belirlenen hedeflere ulaşmasını sağlamak, etkisini belirlemek ve verimini artırmak için planlama, uygulama ve değerlendirme süreçlerinin birbiri ile uyumlu olması gerekmektedir. Bu uyumun sağlanmasında en önemli görev programın uygulayıcısı olan öğretmenlere düşmektedir. Nitekim öğretim programları, uygulama sürecinde çeşitli gerekçelerle öğretmenler tarafından uyarlanmaktadır. Öğretmenlerin programa uymadıkları durumlarda yaptıkları uyarlamaların türleri, çeşitli çalışmalarda belirlenmeye çalışılmıştır (Drake & Sherin, 2006; Li & Harfitt, 2017). Yazıcılar, Bümen ve Uslu (2021) tarafından gerçekleştirilen bir çalışmada, öğretmenlerin yaptıkları program uyarlama örüntülerinin, atlama, genişletme ve yeniden düzenleme şeklinde olduğu belirtilmiş ve bu sayede program uyarlama örüntüleri ortaya konulmuştur. Program uygulama sürecine ilişkin araştırmalar incelendiğinde, okul yöneticileri ve aileler tarafından programın uygulamasına verilen destek, öğretmenlerin hizmet öncesi eğitimi, öğrencilerin hazırbulunuşluk düzeyleri ve öğretmenlerin program okuryazarlık düzeyleri gibi faktörler öne çıkmaktadır (İlhan & Bümen, 2023; Karakuyu, 2023; Kasap Erdal et al., 2023; Uludağ Çınar, 2023). Bu nedenle öğretmenler tarafından yapılan uyarlamaların neler olduğu, hangi sebeplerden kaynaklandığı ve bu uyarlamaların öğretim verimliliğine etkileri incelenmelidir.

Eğitim programlarının amaçlarına ulaşma sürecinde bütün dersler önem taşımaktadır ancak Türkiye'deki matematik başarısının PISA bulguları ve Ekonomik İşbirliği ve Kalkınma Örgütü [OECD] ülkelerinin ortalaması (OECD, 2023) altında olduğu göz önünde bulundurulduğunda, matematik öğretiminin ayrıca önem kazandığı söylenebilir. Bu nedenle bu araştırmada, sınıf öğretmenlerinin ilkokul matematik dersi öğretim programını uygulama sürecinde; resmî program, dersten önce tasarladıkları plan ve ders esnasında uyguladıkları plan ile gerçekleştirdikleri uyarlamalar ve bu uyarlamalar üzerinde etkili faktörlerin incelenmesi amaçlanmıştır. Bu genel amaç doğrultusunda aşağıdaki araştırma sorularına cevap aranmıştır:

1. Resmî öğretim programı ile öğretmenlerin ders planları; amaç, içerik, öğrenme-öğretme süreçleri ve değerlendirme ögeleri açısından ne tur farklılık göstermektedir?

2. Öğretmenlerin ders planları ile sınıfta uygulama amaç, içerik, öğrenme-öğretme süreçleri ve değerlendirme ögeleri açısından ne tür farklılık göstermektedir?

3. Öğretmenlerin ders planlarında ve uygulamada resmî öğretim programından yapılan uyarlamaları etkileyen faktörler nelerdir?

Yöntem

Araştırmada nitel araştırma yöntemlerinden durum çalışması deseni kullanılmıştır. Araştırma soruları kapsamında veriler, 2023-2024 eğitim-öğretim yılı güz döneminde, İç Anadolu bölgesinde bulunan bir ilin merkez ilçesinde, ilkokul düzeyinde görev yapan 12 sınıf öğretmeninin katılımı ile elde edilmiştir. Katılımcılar maksimum çeşitlilik örnekleme yöntemi ile belirlenmiştir. Verilerin toplanması için yarı yapılandırılmış görüşme formu, haftalık planlama ve günlük uygulama değerlendirme formu yanında öğretmenlerin öğretim sürecinde yararlandıkları materyaller, öğrenci ödevleri, çalışma kâğıtları kullanılmıştır. Nitel verilerin analizinde alanyazından faydalanıp oluşturulan kod kitapçığı ile içerik analizi yürütülmüştür. Veri analizinde tümdengelimsel ve tümevarımsal süreçler birlikte yürütülmüş ve verilerin önceki araştırma bulgularıyla eşleştirilmesi aynı zamanda bu araştırmaya özgü kod, alt tema ve temaların da açığa çıkarılması sağlanmıştır (Creswell & Plano Clark, 2014). Araştırmanın geçerlik ve güvenirliğini sağlamak amacıyla katılımcılarla uzun süreli etkileşim, veri çeşitlemesi, katılımcı teyidi, uzman görüşü alınması yönünde çalışmalar yapılmıştır.

Bulgular

Elde edilen bulgulara göre katılımcı öğretmenlerin resmî programa tam olarak uymadıkları, özellikle matematik öğretim programının öğretim sürecinde çeşitli uyarlamalar yaptıkları görülmektedir. Bu uyarlamalara ilişkin frekanslar incelendiğinde katılımcı sınıf öğretmenlerinin sırasıyla en çok genişletme, ardından atlama ve son olarak yeniden düzenleme uyarlamaları yaptıkları belirlenmiştir. Genişletme kapsamında gerçekleştirilen uyarlama sıklıkları incelendiğinde sırasıyla en çok yardımcı kaynaklardan faydalanma, web tabanlı uygulamalardan faydalanma, farklı bir sınıf düzeyine ait konu ve kazanıma yer verme, diğer derslerle ilişkilendirme, ek etkinlikler yaptıkları; atlama örüntüsü kapsamında sırasıyla en çok kazanımı yüzeysel ele aldıkları görülürken ders kitabı kullanmama ve konu/kazanımı eleme şeklinde uyarlamalar gerçekleştirdikleri; yeniden düzenleme şeklinde uyarlamalar yapma konusunda çekimser davrandıkları söylenebilir.

Araştırmaya katılan sınıf öğretmenleri uyguladıkları programda kendi hazırladıkları planlara da tam olarak bağlılık gösterememekte ve uyarlamalar yapmaktadırlar. Bu uyarlamalara ilişkin frekanslar incelendiğinde katılımcı öğretmenlerin sırasıyla en çok genişletme, daha sonra yeniden düzenleme ve atlama şeklinde uyarlamalar yaptıkları görülmektedir. Genişletme örüntüsü kapsamında yapılan uyarlamalar incelendiğinde sırasıyla en çok etkinlikler ekleme, farklı bir sınıf düzeyine ait konu ve kazanıma yer verme, diğer derslerle ilişkilendirme; yeniden düzenleme örüntüsü kapsamında sırasıyla en çok planlanandan farklı yöntem ve materyalleri kullanma, başka bir derse ait saati kullanma, planlanan etkinliği erteleme yapıldığı belirlenmiştir. Atlama örüntüsü kapsamında ise katılımcı öğretmenlerin büyük çoğunluğunun planlanandan daha az etkinliğe yer verdiği görülmektedir.

Katılımcı sınıf öğretmenlerinin planladığı ve uyguladıkları programlar ile gerçekleştirdikleri uyarlamaları etkileyen çeşitli faktörler incelendiğinde en fazla öne çıkan faktörün öğretmenden kaynaklı faktörler olduğu, ardından öğrenciden kaynaklı, okul kaynaklı, veli kaynaklı, öğretim programı kaynaklı olduğu görülmüştür. Katılımcı sınıf öğretmenlerinin gerçekleştirdikleri uyarlamalar üzerinde öğretmenlerin öğrenme ve öğretme yaklaşımının, öğrencinin bilişsel özelliklerinin, okulun fiziki altyapısının, velilerin öğrenciye desteğinin ve ailenin sosyo ekonomik

yapısının programın öğrenci hazırbulunuşluğuna uygun olmamasının uyarlamalar üzerinde en sık görülen alt faktörler olduğu görülmektedir.

Tartışma ve Sonuç

Araştırma kapsamında yapılan görüşmelerden elde edilen bulgular incelendiğinde katılımcı öğretmenlerin planlarında resmî programa bağlılık sergilemeye çalıştıkları, fakat bu bağlılığı doğrudan resmî program ile etkileşime girmektense dolaylı olarak ders kitapları ve diğer yardımcı kaynaklar üzerinden sağlamaya çalıştıkları görülmektedir. Uyarlamaların görülme sıklıkları incelendiğinde de sırasıyla en çok genişletme daha sonra atlama ve yeniden düzenleme yapıldığı görülmüştür. Bümen ve Holmqvist (2022) tarafından gerçekleştirilen araştırmada sınıf öğretmenlerinin en çok genişletme yaptıkları, daha sonra yeniden düzenleme ve atlama şeklinde uyarlamalar gerçekleştirdikleri görülmüştür. Akbulut Taş (2022) tarafından yapılan araştırmada ise öğretmenlerin genellikle yeniden düzenleme olarak adlandırılan uyarlamaları daha sık bir şekilde gerçekleştirdiklerine rastlanmıştır. Bu bulgulardan görüldüğü üzere öğretmenlerin gerçekleştirmiş oldukları uyarlama örüntüleri farklı sıklıktadır.

Bulgular, öğretmenlerin çoğunun planlarına bağlı kalamadığını ve uyguladıkları programda sıklıkla uyarlamalar yaptıklarını göstermektedir. Bu kapsamdaki uyarlamaların çoğunun genişletme, daha sonra yeniden düzenleme ve atlama şeklinde olduğu ve ders esnasında çeşitli değişkenlerin öğretim sürecine dâhil olmasından dolayı doğaçlama bir şekilde gerçekleştiği söylenebilir. Çeşitli araştırmalar incelendiğinde de öğretmenlerin tasarladıkları programa sadık kalamadıkları ve planları üzerinde çeşitli uyarlamalar yaptıkları görülmüştür (Aykaç & Ulubey, 2012; Öztürk, 2012; Štolcová vd., 2023; Yazıcılar, 2016). Konuyu atlama (omission) örüntüsünün daha yakından incelenmesi, konuları yüzeysel olarak işlemek ile tamamen çıkarmak arasında kritik bir ayrım olduğunu ortaya koymaktadır. Bu ayrım keyfi olmaktan ziyade, öğretmenlerin pratik karar verme süreçlerinin incelikli ve son derece bağlamsal doğasını vurgulamaktadır. Yüzeysel işleme, genellikle pragmatik bir uzlaşma olarak ortaya çıkmaktadır. Öğretmenler bu stratejiye, zorunlu olarak algıladıkları ancak yeterli zamana sahip olmadıkları veya öğrencilerinin derinlemesine bir öğrenmeye hazır olmadığına inandıkları konular için başvurmaktadır. Bu, uyarlama öğrencilerin hazırbulunuşlukları ile resmî program arasında denge kurma çabası olarak yorumlanabilir. Buna karşılık, bir konuyu tamamen atlama, daha kesin ve özerk bir pedagojik karara işaret etmektedir. Bu uyarlama türü genellikle öğretmenler bir konuyu öğrencilerinin acil ihtiyaçları için ilgili olduğu düşünülmeyen, gereksiz bir tekrar olarak veya kaynak eksikliği ya da aşırı zaman kısıtlamaları nedeniyle yapılmaktadır. Bu kritik fark, öğretmenlerin program uyarlamalarının tek tip olmadığını aksine, öğretmenle ilgili (örneğin pedagojik inançlar), öğrenciyle ilgili (örneğin algılanan hazırbulunuşluk) ve okulla ilgili (örneğin zaman baskısı) faktörlerin karmaşık bir etkileşimiyle şekillenmektedir.

Araştırmaya katılan sınıf öğretmenlerinin planladıkları ve uyguladıkları programlar arasında farklılıklar olmasının (uyarlamaların) altında yatan çeşitli faktörler olduğu görülmüştür. Bu faktörlere ilişkin frekanslar incelendiğinde en fazla öne çıkan faktörün öğretmenden kaynaklı faktörler olduğu, bu bulgunun diğer kaynaklarla uyumlu olduğu (Akbulut Taş, 2022; An, 2020; Arslan Çelik, 2020; Asri, 2018; Batmaz, 2017; Bilgiç & Batu, 2023; Bümen & Yazıcılar, 2020; Dikbayır, 2018; İlhan & Bümen, 2023; Kasap Erdal vd., 2023; Li & Harfitt, 2017; McCarthey & Woodard, 2018; Ünsal & Çetin, 2019; Yazıcılar & Bümen, 2019), bunu sırasıyla öğrenciden kaynaklı, okul kaynaklı, öğretim programı kaynaklı ve veliden kaynaklı faktörlerin izlediği

görülmüştür. Bu bulgu bütüncül bir bakış açısıyla incelendiğinde öğretmenlerin program uyarlamaları üzerinde etkili faktörleri sıralayan alanyazındaki araştırmaların (Bümen & Yazıcılar, 2020; Li & Harfitt, 2017; Miller Day vd., 2013; Ünsal & Çetin, 2019) bulguları ile örtüşmektedir. Başka bir deyişle, bu araştırmada öğretmenlerin program uyarlamaları üzerinde etkili olan bölgesel faktörler, eğitim sisteminin merkeziyetçi yapısı ve merkezî sınavlardan kaynaklı faktörlere yönelik bulgulara rastlanmamıştır.