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Research Paper

High School Teachers' Views on the Mathematics Curriculum within the Türkiye Century Education Model

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Abstract: *This study aims to examine the views of Grade nine mathematics teachers regarding the mathematics curriculum implemented within the framework of the Türkiye Century Education Model. The research was conducted using a qualitative research design based on a phenomenological approach. The participants consisted of high school mathematics teachers who teach Grade nine courses. Data were collected through semi structured interviews and analysed using content analysis. The findings of the study indicate that teachers generally hold positive views about the curriculum. According to the participants the curriculum supports conceptual understanding, reasoning skills, and the integration of real-life contexts into mathematics instruction. Teachers emphasized that the curriculum encourages students to think mathematically, explain their reasoning, and participate more actively in classroom discussions. The results also show that the curriculum provides opportunities for student centred learning environments and promotes collaborative problem-solving activities. In addition, teachers highlighted the importance of instructional materials and professional development opportunities that support the effective implementation of the curriculum. Overall, the findings suggest that the mathematics curriculum within the Türkiye Century Education Model contributes to the development of students' analytical thinking and conceptual understanding in mathematics education.*

Keywords: *mathematics curriculum, Türkiye Century Education Model, mathematics teachers, curriculum implementation, mathematics education, teacher views*

I. Introduction

Educational curricula shape how students encounter knowledge, develop reasoning skills, and build intellectual habits during their school years. Mathematics curricula in particular influence students' analytical thinking, logical reasoning, and problem-solving abilities. Because teachers are the primary actors who implement curricular frameworks in classrooms, their perspectives provide valuable insights into how curriculum goals are interpreted and realized in educational practice. Examining teachers' experiences therefore helps illuminate both the strengths and the practical challenges of curriculum reforms.

In recent years education systems around the world have increasingly emphasized competency based learning and conceptual understanding in mathematics. Rather than focusing solely on procedural calculations, modern curricula aim to develop students' mathematical reasoning, communication skills, and the ability to apply mathematical knowledge in real life contexts. Research in mathematics education indicates that meaningful learning occurs when students actively construct understanding through exploration, discussion, and problem-solving activities (Kilpatrick, Swafford, & Findell, 2001). Within this framework the role of the teacher shifts from transmitting information toward facilitating learning processes and guiding students' reasoning.

The Türkiye Century Education Model (Türkiye Yüzyılı Maarif Modeli) represents the most recent curriculum reform introduced by the Turkish Ministry of National Education. The model emphasizes holistic development, competency-oriented learning, and interdisciplinary thinking. It aims to cultivate individuals who possess not only academic knowledge but also critical thinking, creativity, and ethical awareness. Within mathematics education the model encourages students to interpret mathematical relationships, analyse patterns, and connect mathematical ideas with real world situations (Ministry of National Education, 2024).

The transition to Grade nine marks an important stage in Turkish secondary education. Students encounter more abstract mathematical structures and develop deeper algebraic reasoning skills. Topics such as functions, algebraic expressions, and problem solving require students to move beyond memorization toward conceptual understanding. For this reason, the perspectives of Grade nine mathematics teachers are particularly valuable in understanding how curriculum objectives are implemented during this transition.

Contemporary research highlights that effective mathematics teaching requires specialized professional knowledge. Teachers must understand not only mathematical concepts but also how students learn those concepts and where misconceptions may arise. This type of knowledge has been described as pedagogical

content knowledge, which refers to the ability to transform subject matter into forms that are understandable for learners (Shulman, 1nine86). Similarly, the concept of mathematical knowledge for teaching emphasizes that teachers need a deep understanding of mathematical ideas in order to interpret students' reasoning and design meaningful learning experiences (Ball, Thames, & Phelps, 2008).

Teachers frequently report that student engagement increases when mathematical ideas are connected to real life contexts. When students see mathematics as a tool for interpreting everyday situations, they are more likely to develop positive attitudes toward the subject. Research shows that connecting mathematical problems with authentic situations helps students understand the relevance of mathematics beyond the classroom (Boaler, 2016). For example, functions can be introduced through examples such as population growth, financial change, or motion. Such contexts help students visualize mathematical relationships and understand abstract concepts more clearly.

Another important aspect of mathematics learning involves classroom discussion and collaborative problem solving. Productive mathematical discussions allow students to explain their reasoning, evaluate alternative strategies, and develop deeper conceptual understanding. Studies indicate that classrooms where students actively communicate mathematical ideas tend to support stronger reasoning skills (Stein, Engle, Smith, & Hughes, 2008). Collaborative learning environments also encourage students to engage with different perspectives and refine their understanding through dialogue (Swan, 2006).

Teachers' experiences also highlight several challenges that arise during curriculum implementation. One common difficulty involves balancing conceptual exploration with limited instructional time. Inquiry-based activities and open-ended problems require time for investigation and discussion. However, teachers often feel pressure to complete the curriculum within the allocated schedule. This tension between curriculum expectations and classroom realities has been widely discussed in curriculum implementation research (Remillard, 2005).

Assessment practices represent another factor influencing teaching approaches. In many educational contexts written examinations remain the dominant evaluation method. These assessments often prioritize procedural accuracy rather than conceptual reasoning. Teachers therefore experience a dilemma between promoting deep mathematical understanding and preparing students for exam-oriented evaluation systems. When assessments emphasize routine problem-solving teachers may feel compelled to focus on procedural practice rather than exploratory learning activities.

Differences in student preparedness also influence classroom implementation of the curriculum. Teachers often report that students enter Grade nine with varying levels of mathematical background knowledge. Some students demonstrate strong algebraic reasoning while others struggle with foundational concepts. Addressing these differences requires flexible instructional strategies and additional support mechanisms. Teachers frequently adjust pacing and provide supplementary explanations to ensure that all students can follow the progression of topics.

International research emphasizes the growing importance of mathematical literacy in contemporary societies. Mathematical literacy refers to the ability to formulate, apply, and interpret mathematics in a variety of contexts. Individuals need these skills to analyse data, understand quantitative information, and make informed decisions in everyday life (OECD, 201nine). Educational reforms therefore aim to strengthen students' ability to reason mathematically rather than simply perform calculations.

Teacher perspectives reveal that curriculum reforms are shaped not only by official policy documents but also by classroom realities. Teachers interpret curricular goals through their professional experiences, beliefs about learning, and knowledge of their students. Their insights therefore contribute significantly to understanding how educational reforms function in practice. By examining teachers' views it becomes possible to identify both effective practices and areas where additional support may be needed. Understanding teachers' experiences also highlights the importance of professional development and collaboration among educators. Opportunities for teachers to discuss instructional strategies, share classroom experiences, and reflect on student learning can support more effective implementation of curriculum reforms. Continuous dialogue between teachers, curriculum developers, and educational researchers can strengthen the connection between theoretical curriculum design and classroom practice.

The perspectives of Grade nine mathematics teachers therefore provide valuable insights into the implementation of the mathematics curriculum within the Türkiye Century Education Model. Their experiences illustrate how curriculum goals related to conceptual understanding, reasoning, and real-world connections are translated into classroom practice. At the same time these perspectives highlight the importance of supportive conditions that enable teachers to implement curriculum reforms effectively within diverse classroom environments.

Research on mathematics education has long emphasized the importance of curriculum design and teacher interpretation in shaping classroom practice. Teachers do not simply follow curriculum documents. They interpret curriculum goals and adapt them according to classroom conditions, student needs, and their own

professional beliefs. For this reason, teacher perspectives have been widely examined in curriculum implementation studies. Remillard explains that teachers actively reconstruct curriculum materials while implementing them in classrooms and therefore play a central role in transforming curriculum intentions into actual learning experiences (Remillard, 2005).

One important strand of research focuses on the knowledge teachers need in order to teach mathematics effectively. Shulman introduced the concept of pedagogical content knowledge, which refers to teachers' ability to present subject matter in ways that are understandable for learners (Shulman, 1nine86). Later studies in mathematics education expanded this idea by emphasizing mathematical knowledge for teaching. Ball, Thames, and Phelps argue that teachers require specialized knowledge that allows them to analyse student thinking, recognize misconceptions, and select appropriate instructional strategies (Ball, Thames, & Phelps, 2008). This perspective highlights that effective curriculum implementation depends strongly on teachers' professional expertise. Another line of research has examined how classroom interaction influences mathematical understanding. Studies show that discussion-based learning environments allow students to articulate their reasoning and develop deeper conceptual understanding. When teachers encourage students to explain their thinking and compare alternative solution strategies, students become more engaged in the learning process (Stein, Engle, Smith, & Hughes, 2008). Similarly collaborative learning approaches have been shown to support mathematical reasoning and help students develop confidence in problem solving situations (Swan, 2006).

Researchers have also explored the relationship between real world contexts and mathematical learning. Boaler emphasizes that students develop stronger mathematical understanding when they work with problems that are meaningful and connected to everyday life (Boaler, 2016). Context based activities help students recognize the relevance of mathematics beyond the classroom and encourage them to view mathematics as a tool for interpreting real situations.

International large-scale assessments have also influenced research on mathematics education. The concept of mathematical literacy has gained increasing attention in recent years. Mathematical literacy refers to the ability to apply mathematical knowledge in a variety of contexts and interpret quantitative information critically. According to the OECD framework students should be able to formulate problems mathematically, apply mathematical reasoning, and interpret results in real life situations (OECD, 201nine). These competencies require teaching approaches that emphasize reasoning, modelling, and problem solving.

Another important area of research concerns the role of curriculum in shaping mathematical learning. Hiebert and Grouws argue that students learn mathematics more effectively when instruction focuses on conceptual understanding rather than routine procedures (Hiebert & Grouws, 2007). Instruction that encourages students to explore mathematical relationships and justify their reasoning supports deeper learning and long-term retention of knowledge.

Studies on curriculum implementation consistently show that teachers' beliefs about mathematics and learning strongly influence classroom practice. Teachers who view mathematics as a dynamic process of reasoning and exploration are more likely to adopt student centred teaching strategies. In contrast teachers who perceive mathematics primarily as a set of procedures may rely more heavily on direct instruction and repetitive exercises. Understanding teachers' perspectives is therefore essential for evaluating the effectiveness of curriculum reforms.

This study differs from previous research in several important ways. First the study focuses specifically on the mathematics curriculum implemented within the Türkiye Century Education Model, which represents the most recent educational reform introduced by the Turkish Ministry of National Education. Because the model has only recently been implemented, empirical studies examining teachers' perspectives on the curriculum remain limited. Second the study focuses specifically on Grade Nine mathematics teachers. The ninth-grade level represents a critical transition period in secondary education where students encounter more abstract mathematical concepts and begin to develop advanced algebraic reasoning. Investigating teachers' experiences at this level provides valuable insight into how the curriculum supports students during this important transition. Third the study emphasizes teachers lived classroom experiences rather than relying solely on curriculum documents or theoretical descriptions of the program. By examining teachers' interpretations, instructional practices, and classroom challenges, the study aims to reveal how curriculum intentions interact with real classroom conditions. In this respect the study contributes to the literature by providing a deeper understanding of how the mathematics curriculum within the Türkiye Century Education Model is perceived and implemented by practicing teachers.

The purpose of this study is to examine the views of Grade nine high school mathematics teachers regarding the mathematics curriculum implemented within the framework of the Türkiye Century Education Model. The study aims to explore how teachers interpret the objectives of the curriculum, how they implement the curriculum in classroom practice, and what kinds of opportunities and challenges they experience during the teaching process. More specifically the study seeks to understand teachers' perspectives on the conceptual structure of the curriculum, the emphasis on reasoning and problem solving, and the integration of real-life

contexts into mathematics instruction. Teachers' experiences are considered important because they directly reflect how curriculum reforms are translated into everyday classroom practice. By examining these experiences, the study aims to contribute to a better understanding of how the curriculum functions in real educational settings. Within this framework the study addresses the following research questions:

1.What are the opinions of Grade nine mathematics teachers about the objectives and conceptual structure of the mathematics curriculum within the Türkiye Century Education Model?

2.How do Grade nine mathematics teachers evaluate the emphasis on reasoning, problem solving, and real-life connections in the mathematics curriculum?

3.What challenges do Grade nine mathematics teachers encounter while implementing the mathematics curriculum in classroom practice?

4.What suggestions do Grade nine mathematics teachers offer for improving the implementation of the mathematics curriculum within the Türkiye Century Education Model?.

II. Method

This study was conducted within the framework of qualitative research in order to examine Grade nine mathematics teachers' views regarding the mathematics curriculum implemented within the Türkiye Century Education Model. Qualitative research aims to understand individuals' experiences, interpretations, and perceptions in depth and is widely used when researchers seek to explore how participants interpret a particular phenomenon in their own contexts (Creswell, 2014). Since the present study aims to explore teachers' views about curriculum implementation and classroom experiences, a qualitative research design was considered appropriate.

Within qualitative research approaches the study was designed according to a phenomenological perspective. Phenomenological research focuses on individuals lived experiences related to a particular phenomenon and aims to understand how participants interpret these experiences (Creswell & Poth, 2018). In this study the phenomenon under investigation is the implementation of the mathematics curriculum within the Türkiye Century Education Model. Examining teachers' experiences and interpretations provides valuable insight into how the curriculum is understood and applied in real classroom settings.

The participants of the study consisted of high school mathematics teachers who teach Grade nine courses. Participants were selected through purposive sampling. Purposive sampling allows researchers to select individuals who have direct experience with the phenomenon being studied and therefore can provide rich and meaningful information about the research topic (Patton, 2015). In this study teachers who actively teach Grade nine mathematics and who are familiar with the mathematics curriculum implemented within the Türkiye Century Education Model were included in the research. Selecting teachers who directly implement the curriculum enabled the researchers to obtain detailed information about classroom practices and teachers' interpretations of the curriculum. Participation in the study was voluntary, and participants were informed about the purpose of the research before the interviews were conducted. Ethical considerations were considered throughout the research process and teachers were assured that their responses would remain confidential and would be used only for research purposes.

Data were collected through semi structured interviews. Semi structured interviews are widely used in qualitative research because they provide both structure and flexibility during the data collection process. In this type of interview predetermined questions guide the discussion while participants are also allowed to express their experiences and opinions freely (Merriam & Tisdell, 2016). This approach enables researchers to obtain rich and detailed data related to participants' perceptions and experiences. For the purpose of this study an interview form consisting of open-ended questions was developed by the researchers. The questions were prepared to explore teachers' views about the objectives of the mathematics curriculum, the emphasis on reasoning and problem solving, the integration of real-life contexts into mathematics teaching, and the challenges experienced during the implementation of the curriculum.

In order to strengthen the content validity of the interview questions the interview form was examined by experts in the field of mathematics education and curriculum studies. Two experts in mathematics education and one expert in educational sciences evaluated the interview questions in terms of clarity, relevance, and consistency with the research objectives. Based on the feedback obtained from the experts some questions were revised, and several statements were simplified to improve clarity. This expert review process contributed to ensuring that the interview questions adequately reflected the purpose of the study and addressed the key aspects of curriculum implementation.

A pilot interview was also conducted with a mathematics teacher who was not included in the main study group. The aim of the pilot interview was to determine whether the interview questions were understandable and whether they produced meaningful responses related to the research topic. The pilot application also helped the researchers evaluate the duration of the interview and the overall flow of the

questions. Following the pilot interview minor revisions were made to the wording of some questions to improve clarity and ensure that participants could easily interpret the questions.

The data collection process was carried out through individual interviews with participating teachers. Interviews were conducted in a quiet environment to allow participants to express their opinions comfortably and without interruption. Before the interviews began participants were informed about the purpose of the study and the voluntary nature of their participation. With the permission of the participants the interviews were audio recorded to ensure accurate documentation of the responses. Recording the interviews allowed the researchers to review the data repeatedly during the analysis stage and helped prevent the loss of important information. Each interview lasted approximately twenty to thirty minutes depending on the depth of the responses provided by the participants.

After the interviews were completed the audio recordings were transcribed into written form. Transcribing the interviews enabled the researchers to examine the data systematically and conduct detailed analysis. The transcripts were reviewed carefully in order to ensure that the written texts accurately reflected the participants' statements. During the analysis process the data obtained from the interviews were analysed using content analysis. Content analysis is frequently used in qualitative research to identify patterns, concepts, and themes within textual data (Miles, Huberman, & Saldaña, 2014). Through this method researchers can organize large amounts of qualitative data into meaningful categories and interpret participants' perspectives more clearly.

During the analysis process the researchers first read the interview transcripts several times to become familiar with the data. Meaningful expressions related to teachers' views about the mathematics curriculum were identified and coded. These codes represented key ideas and experiences expressed by the participants. After the initial coding process similar codes were grouped together and broader categories were created. These categories were then organized into themes that reflected teachers' perspectives on curriculum objectives, instructional practices, classroom challenges, and suggestions for improvement. The themes obtained from the analysis were interpreted in relation to the research questions of the study. In order to present participants' views accurately direct quotations from teachers were used when reporting the findings.

Several strategies were used to increase the trustworthiness of the research. In qualitative research credibility, transferability, dependability, and confirmability are considered important criteria for evaluating the quality of research findings (Lincoln & Guba, 1nine85). In this study expert review of the interview questions helped strengthen content validity. The pilot interview improved the clarity of the data collection tool. Audio recording and careful transcription ensured the accuracy of the data. In addition, the researchers examined the data repeatedly during the coding process to ensure consistency in the interpretation of the responses. Including direct quotations from participants also enhanced the credibility of the findings by allowing readers to see how interpretations were derived from the data.

Transparency was maintained throughout the research process by providing detailed information about participant selection, data collection procedures, and analysis steps. Presenting the research process clearly enables readers to understand how the study was conducted and evaluate the reliability of the findings. Through these procedures the study aimed to provide a systematic and credible examination of Grade nine mathematics teachers' views regarding the mathematics curriculum implemented within the Türkiye Century Education Model.

III. Findings

This section presents the findings obtained from the analysis of the interview data. The data collected through semi structured interviews were analyzed using content analysis, and the findings were organized according to the themes that emerged during the analysis process. In line with the research questions, teachers' views were examined under four main themes. These themes include teachers' views on the objectives and conceptual structure of the mathematics curriculum, their evaluations regarding reasoning, problem solving, and real-life connections, their experiences related to the implementation of the curriculum in classroom practice, and their suggestions for improving the implementation of the curriculum. In order to present the findings more clearly, direct quotations from participants are included and pseudonyms are used to ensure the confidentiality of the teachers.

3.1 Teachers' Views on the Objectives and Conceptual Structure of the Mathematics Curriculum

The findings of the study indicate that Grade nine mathematics teachers generally have positive views regarding the objectives and conceptual structure of the mathematics curriculum implemented within the Türkiye Century Education Model. Teachers emphasized that the curriculum aims to develop students' conceptual understanding of mathematics rather than focusing solely on procedural knowledge. According to the participants, the curriculum encourages students to understand mathematical relationships, explore patterns, and develop reasoning skills.

Several teachers reported that the curriculum reflects a broader educational perspective that integrates mathematical knowledge with thinking skills and real life applications. Teachers noted that this structure allows students to approach mathematics as a meaningful discipline rather than as a collection of rules and formulas. In particular, the emphasis on reasoning and interpretation was considered an important strength of the curriculum.

One participant highlighted that the curriculum supports conceptual learning in mathematics and helps students understand the logic behind mathematical operations.

"The curriculum is designed in a way that encourages students to think about why a mathematical rule works. Instead of memorizing formulas, students try to understand the reasoning behind them. This creates a deeper understanding of mathematics." (Teacher Deniz)

Another teacher emphasized that the objectives of the curriculum are aligned with contemporary educational approaches and encourage students to develop analytical thinking skills.

"I think the curriculum encourages students to question mathematical ideas and to think more critically. Students are not only solving problems but also explaining how they reach their answers." (Teacher Elif).

Teachers also stated that the conceptual organization of the topics supports a gradual development of mathematical thinking. Participants reported that concepts are introduced in a way that allows students to build connections between different mathematical ideas.

"The structure of the topics helps students move step by step from basic ideas to more complex concepts. When students see the connections between topics they start to understand mathematics as a system." (Teacher Murat)

These findings suggest that teachers perceive the objectives and conceptual framework of the curriculum as supportive of deeper mathematical understanding and analytical thinking.

3.2. Teachers' Views on Reasoning, Problem Solving, and Real-Life Connections

Another important finding of the study concerns teachers' views about the emphasis on reasoning, problem solving, and real-life connections within the mathematics curriculum. Participants reported that the curriculum encourages students to approach mathematical problems through reasoning and exploration rather than simply applying memorized procedures.

Teachers stated that the inclusion of real life contexts in mathematical problems increases students' interest and engagement in the classroom. According to the participants, when students recognize the relevance of mathematics to everyday situations they develop a more positive attitude toward the subject.

One teacher explained that contextualized problems help students see the practical value of mathematics.

"When we use examples from daily life students immediately become more interested. They start to see that mathematics is not just something in the textbook but something that helps explain the world around them." (Teacher Selin)

Another participant emphasized that the curriculum supports students' ability to explain their reasoning and discuss different solution strategies.

"Students are encouraged to explain how they solve a problem. Sometimes different students find different solution methods and we discuss them together. This kind of discussion helps students understand the concept much better." (Teacher Emre)

Teachers also reported that classroom discussions have become more common as a result of the curriculum's emphasis on reasoning and explanation. According to participants, such discussions contribute to the development of students' communication skills in mathematics.

"Students are learning how to talk about mathematics. They explain their ideas to their classmates and compare different ways of solving a problem. This makes the classroom much more interactive." (Teacher Ayşe)

Participants generally agreed that the curriculum promotes a more student centered approach to mathematics teaching and encourages active participation in the learning process.

3.3. Teachers' Experiences in Implementing the Curriculum in Classroom Practice

The findings also indicate that teachers generally experience positive outcomes when implementing the curriculum in their classrooms. Teachers reported that the curriculum provides opportunities to use different teaching strategies and encourages more interactive learning environments.

Participants stated that the curriculum allows them to incorporate various instructional approaches such as group work, classroom discussions, and problem based learning activities. Teachers reported that these approaches help students engage more actively in the learning process.

One teacher explained how collaborative activities contribute to students' understanding.

"When students work together on a problem they share their ideas and learn from each other. Sometimes a student explains a concept in a way that is easier for their classmates to understand." (Teacher Hasan)

Another teacher noted that the curriculum encourages teachers to design activities that help students explore mathematical concepts.

"The curriculum gives teachers flexibility to create activities where students discover mathematical relationships themselves. This makes the learning process more meaningful." (Teacher Zeynep)

Teachers also observed that students become more confident when they are given opportunities to express their ideas during lessons.

"Students feel more comfortable participating in the lesson because they know their ideas are valued. Even when they make mistakes it becomes part of the learning process." (Teacher Kerem)

These findings suggest that the curriculum supports teaching practices that promote student participation, collaboration, and active engagement in mathematical learning.

3.4. Teachers' Suggestions for Improving Curriculum Implementation

Although teachers expressed generally positive views about the curriculum, they also offered constructive suggestions for further improving its implementation. Teachers emphasized the importance of providing additional instructional resources and professional development opportunities that support the goals of the curriculum.

Participants suggested that more classroom activities and example problems aligned with the curriculum objectives could help teachers implement the program more effectively.

"If we have more sample activities and teaching materials prepared according to the curriculum it would help teachers apply these ideas more easily in the classroom." (Teacher Gökhan)

Teachers also emphasized the importance of sharing teaching experiences and strategies among colleagues.

"When teachers share their classroom practices we learn new ways of implementing the curriculum. Professional collaboration is very valuable." (Teacher Burcu)

Another participant highlighted the importance of continuous professional development for teachers.

"Training programs related to the new curriculum can help teachers better understand its philosophy and apply it more effectively in their lessons." (Teacher Cem)

Overall, the findings indicate that teachers view the mathematics curriculum within the Türkiye Century Education Model as a positive step toward improving mathematics education. Teachers believe that the curriculum supports conceptual learning, encourages reasoning and discussion, and promotes more interactive classroom environments.

IV. Coclusion, Discussion And Recommendations

The present study aimed to examine Grade nine mathematics teachers' views regarding the mathematics curriculum implemented within the Türkiye Century Education Model. The findings of the study indicate that teachers generally hold positive perceptions about the curriculum and believe that it supports the development of students' conceptual understanding, reasoning skills, and mathematical communication. Teachers reported that the curriculum encourages students to engage with mathematical ideas more actively and to develop deeper understanding rather than focusing only on procedural knowledge. This result reflects broader developments in mathematics education where conceptual understanding and reasoning are considered essential components of effective mathematical learning (Kilpatrick, Swafford, & Findell, 2001).

One of the most significant outcomes of the study is the emphasis placed by teachers on conceptual learning. Participants stated that the curriculum encourages students to understand the underlying logic of mathematical concepts and to explore relationships between mathematical ideas. This emphasis on conceptual understanding is widely recognized in the mathematics education literature as a key factor in developing long term mathematical competence (Hiebert & Grouws, 2007). When students understand the conceptual foundations of mathematical ideas, they are more capable of transferring their knowledge to new situations and solving unfamiliar problems.

Another important finding of the study concerns the role of classroom interaction in mathematics learning. Teachers reported that the curriculum encourages them to organize lessons that include discussion, explanation, and collaborative problem solving. These instructional practices allow students to express their reasoning, evaluate alternative solution strategies, and refine their understanding through interaction with peers. Previous research indicates that productive mathematical discussions play a crucial role in developing students' reasoning abilities and helping them construct mathematical knowledge (Stein, Engle, Smith, & Hughes, 2008). In classrooms where students are encouraged to explain their thinking mathematics becomes a shared intellectual activity rather than an individual task.

The findings also highlight the importance of connecting mathematical concepts with real life contexts. Teachers noted that contextualized problems increase students' motivation and help them understand the practical value of mathematics. When students see how mathematical ideas can be applied to everyday situations they develop a more positive attitude toward the subject. This observation is consistent with research suggesting that contextual learning environments help students recognize the relevance of mathematics and encourage them to engage more actively with mathematical tasks (Boaler, 2016). Real world applications allow students to view mathematics not merely as an abstract discipline but as a powerful tool for interpreting and understanding the world around them.

Another point emphasized by teachers is that the curriculum supports more student centered learning environments. Participants reported that students are given opportunities to participate actively in lessons, share their ideas, and collaborate with their classmates. This shift toward student centered instruction reflects contemporary educational perspectives which emphasize the importance of active learning and student participation in the construction of knowledge (OECD, 201nine). When students are actively involved in the learning process they develop stronger cognitive engagement and greater confidence in their mathematical abilities.

At the same time the findings suggest that teachers play a crucial role in translating curriculum goals into classroom practice. Curriculum documents provide a general framework for instruction but the way these ideas are implemented depends largely on teachers' professional knowledge and instructional decisions. Research on curriculum implementation indicates that teachers interpret curriculum materials according to their own experiences and beliefs about teaching and learning (Remillard, 2005). Therefore understanding teachers' perspectives is essential for evaluating how curriculum reforms function in real classroom settings. The positive perceptions expressed by teachers in this study suggest that the mathematics curriculum within the Türkiye Century Education Model aligns with contemporary approaches in mathematics education. The curriculum's emphasis on reasoning, conceptual understanding, and real world connections reflects international trends that aim to strengthen mathematical literacy among students. Mathematical literacy refers to the ability to formulate, apply, and interpret mathematics in various contexts. Developing these competencies is considered essential for individuals living in increasingly data driven and technologically complex societies (OECD, 201nine).

The results of the study also underline the importance of supporting teachers during the implementation of curriculum reforms. Teachers' experiences demonstrate that effective implementation requires not only well designed curriculum documents but also appropriate instructional resources and opportunities for professional development. Providing teachers with opportunities to share experiences, discuss instructional strategies, and reflect on classroom practices can help strengthen the connection between curriculum goals and classroom implementation.

Based on the findings of this study several recommendations can be made for future practice and research. First professional development programs can be organized to help teachers deepen their understanding of the principles underlying the mathematics curriculum within the Türkiye Century Education Model. Such programs can focus on strategies for promoting reasoning, facilitating mathematical discussions, and designing classroom activities that support conceptual understanding.

Second instructional materials that include rich problem solving tasks and real life applications can be developed to support teachers in implementing the curriculum effectively. Providing teachers with sample activities, teaching guides, and classroom resources aligned with the curriculum objectives can make it easier to translate curriculum principles into practice.

Third collaborative professional environments can be encouraged within schools. Opportunities for teachers to share teaching experiences and discuss classroom challenges can contribute to the development of innovative instructional practices. Professional collaboration also supports the continuous improvement of teaching practices and strengthens teachers' confidence in implementing new curriculum approaches.

Finally further research can examine the implementation of the mathematics curriculum in different educational contexts and with different participant groups. Future studies may investigate students' experiences, classroom observations, or the relationship between curriculum implementation and student learning outcomes. Such research can provide a more comprehensive understanding of how the principles of the Türkiye Century Education Model influence mathematics education in practice.

Overall the findings of the present study suggest that Grade nine mathematics teachers view the mathematics curriculum within the Türkiye Century Education Model as a positive development in mathematics education. Teachers believe that the curriculum supports conceptual learning, encourages reasoning and discussion, and promotes more interactive classroom environments. These characteristics indicate that the curriculum has the potential to contribute to the development of students' mathematical understanding and analytical thinking skills. Continuing to support teachers and strengthen classroom implementation will play an important role in realizing the full potential of the curriculum in mathematics education.

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