



EXPLORING MATHEMATICS TEACHING PRACTICES IN ISRAEL: TEACHERS' APPROACHES AND STRATEGIES

Iuliana ZSOLDOS-MARCHIS, Einav LONDON

Abstract: This paper examines how mathematics teachers in Israel approach their work, with attention to the ways they build positive attitudes, show the importance of mathematics, support creativity, and adapt lessons to individual students. The study surveyed 200 teachers using a questionnaire that included demographic information, Likert-scale items, and open-ended questions. Results from the quantitative analysis show that most teachers enjoy teaching math and are open to trying new methods, technology, and formative assessment. The qualitative findings indicate that teachers often connect math to everyday life, other school subjects, and highlight the development of thinking skills. They also encourage creativity through open questions, games, group work, and flexible problem-solving. Personalization is achieved by giving individual support, using tasks of different levels, and applying varied teaching strategies. Teachers' passion for mathematics plays an important role in motivating students and lowering anxiety. Overall, the study shows that effective teaching combines high standards with personalization, real-life relevance, and opportunities for creative learning.

Key words: teachers' attitude towards teaching, developing positive attitude towards mathematics, developing creativity, value of mathematics.

1. Introduction

Although mathematics is essential for both academic success and everyday life, many students still struggle with low achievement and negative attitudes toward the subject. Students who underperform often lose interest in math as they progress through school, even if they recognize its importance. This suggests that traditional teaching methods do not engage them effectively (Russo et al., 2023). Numerous studies have also shown that repeated failure and anxiety contribute to entrenched negative attitudes, which in turn further hinder learning outcomes (Mata et al., 2012). These challenges are evident in different educational contexts. Particularly, in Israel, mathematics education is strongly shaped by the national curriculum and the Bagrut (matriculation) exam, which divide students into three-, four-, and five-unit tracks. While the five-unit track is prestigious and opens doors to selective academic pathways, this system also generates tensions between exam preparation and fostering creativity, as well as challenges in culturally and linguistically diverse classrooms. Teachers in such contexts must negotiate between rigor and personalization, balancing external demands with students' well-being (Leikin & Levav-Waynberg, 2007; OECD, 2019a, 2019b). Addressing these challenges more broadly calls for a shift toward student-centered, problem-solving approaches that can rekindle interest and improve both attitudes and achievement in mathematics. Teachers themselves also recognize the need for this pedagogical shift as they advance in their careers (Ciascai & Zsoldos-Marchis, 2016). For teaching to be successful, students should not remain passive recipients of knowledge but rather active participants in their learning, with greater freedom to decide how to explore topics and approach problem-solving (Ciascai & Zsoldos-Marchis, 2016; London, 2022; London & Zsoldos-Marchis, 2025). Thus, teachers should act more as guides for students, facilitating their exploration of mathematical concepts, encouraging independent problem-solving, and fostering positive attitudes rather than simply transmitting knowledge. Using engaging strategies can lower anxiety and increase student engagement (Dweck, 2006; Boaler, 2016). For example, gamification or game-based learning could develop positive attitude and increase achievement (Zsoldos-Marchis, 2020a; Zsoldos-Marchis, 2020b).

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The teacher is responsible for the success of students; their role is to help learners overcome negative self-images by creating expectations that enable them to succeed (Moore, 2007). Indeed, the teacher is the key factor influencing students' attitudes toward mathematics (Marchis, 2011). Students' attitudes themselves integrate cognitive, affective, and behavioral dimensions (Di Martino & Zan, 2010), which means that effective teaching must go beyond transmitting content to address motivation and emotions. Teachers also play a crucial role in shaping students' levels of mathematics anxiety, although they are not always fully aware of this influence (Polacco et al., 2023).

Many students dislike mathematics because they fail to see its utility in daily life (Marchis, 2011; Marchis & Balogh, 2010). Teachers should emphasize mathematics as both practically useful and intellectually enriching. By showing its applications to careers, technology, and real-life problem-solving, mathematics is presented as essential for students' futures (Eccles & Wigfield, 2002; Niss & Højgaard, 2011; OECD, 2019). Thus, showing the application of mathematics in other disciplines contributes to improving students' attitudes (Asli & Zsoldos-Marchis, 2023b). Teachers acknowledge that integrating different STEM domains is essential (Ciascai & Zsoldos-Marchis, 2019) and that demonstrating the applications of mathematics in other disciplines is important (Asli & Zsoldos-Marchis, 2021). However, many do not feel adequately prepared to illustrate such applications and express the need for mentorship from STEM specialists (Asli & Zsoldos-Marchis, 2021; Zsoldos-Marchis & Ciascai, 2019). Research further indicates that providing teachers with concrete examples enhances their self-confidence in teaching mathematics through real-life applications and interdisciplinary connections (Asli & Zsoldos-Marchis, 2023a; Polacco, 2025).

Another important aspect of successful mathematics learning is personalized instruction, which emphasizes adapting teaching to students' individual needs. This approach allows learners to choose their preferred ways of engaging with content and demonstrating knowledge, thereby creating a learning environment in which goals, content, methods, and pace are customized for each student (Tomlinson & Eidson, 2003; Tomlinson & Strickland, 2005). To implement personalization effectively, teachers need to be flexible and reflective, cultivating openness, critically examining their own practices, and caring for each student according to his or her learning profile (Bekcer, 2016; Fensham et al., 2016; Pane et al., 2015). Frameworks such as differentiated instruction (Tomlinson, 2014) and formative assessment (Black & Wiliam, 2009) provide practical strategies for tailoring tasks to students' readiness levels. Research further shows that personalized approaches enhance inclusiveness in diverse classrooms, while reducing anxiety, strengthening self-efficacy, and fostering equitable learning opportunities (Suprayogi et al., 2017).

Creativity is increasingly recognized as central to mathematics education. Teachers encourage divergent thinking by posing open-ended questions, integrating games, and allowing multiple solution strategies (Bragg, 2007; Leikin, 2009; Liljedahl et al., 2021). These methods transform mathematics into a space for discovery and innovation. The importance of creativity and interdisciplinary links in mathematics education has also been stressed in STEAM research (Lavicza et al., 2018).

As discussed in the previous paragraphs, teachers play a crucial role in mathematics learning, and there are many factors they must consider ensuring successful teaching. They need to be open to new instructional strategies and willing to invest time in preparing engaging lessons. Research shows that teachers' enjoyment of mathematics directly shapes the classroom climate, influencing students' motivation, engagement, and willingness to take risks. Enthusiastic teachers foster a sense of curiosity that can reduce students' anxiety, encourage active participation, and promote positive attitudes toward mathematics (Frenzel et al., 2009; Hargreaves, 2000).

This paper reports on a survey study examining teachers' approaches to mathematics instruction, with particular attention to strategies for fostering positive attitudes toward mathematics, demonstrating its value, providing personalized instruction, employing engaging teaching methods, and utilizing varied assessment practices.

2. Methodology

The research was carried out in 2021 in Israel.

2.1. Scope of the research

The research aimed at finding answers to the following questions:

1. Do teachers enjoy teaching mathematics?
2. How do teachers develop a positive attitude towards learning mathematics?
3. How do teachers show to their students that leaning mathematics is valuable for their life?
4. What strategies do teachers use to develop students' creativity in learning mathematics?
5. How do teachers personalize their teaching to each student?

2.2. Instrument

A questionnaire was developed specially for this study based on scientific literature. It has two main parts: the first part contains demographic questions and the second part questions regarding the research topic. There are 5 demographical questions asking for the respondents' sex, age, education level, years of experience, and the level of mathematics they teach. There are 16 questions related to the research topic, from which 7 are open questions and 9 are closed questions formulated as statements measured on a 5-level Likert scale.

The questionnaire can be consulted in the Appendix.

2.3. Participants

200 mathematics teachers participated in this research. Table 1 presents averages, standard deviations and ranges for the continuous demographic variables followed by the common distributions for the categorical demographic variables of the participants who made up the sample in the present study.

Table 1. Descriptive statistics of demographic variables

| Variable | <i>n</i> | Minimum | Maximum | M | SD |
|--|----------|----------|---------|-------|------|
| Age in years | 198 | 22 | 72 | 49.82 | 5.72 |
| Seniority in teaching in years | 199 | 2 | 55 | 23.06 | 7.37 |
| Variable and categories | | <i>n</i> | | % | |
| Gender | | 200 | | 100 | |
| Men | | 72 | | 36 | |
| Women | | 123 | | 61.5 | |
| Formal level of education | | 197 | | 100 | |
| Undergraduate degree | | 65 | | 33 | |
| Master's degree | | 126 | | 64 | |
| PhD | | 5 | | 2.5 | |
| Other | | 1 | | 0.5 | |
| Level of study in mathematics¹ | | 196 | | 100 | |
| Three units | | 54 | | 27.6 | |
| Four units | | 8 | | 4.1 | |
| Five units | | 9 | | 4.6 | |
| All units | | 121 | | 61.7 | |
| Other | | 4 | | 2 | |

n indicates the number of respondents, At some questions *n* is less than 200 because there were few participants who did not answer each question.

¹ In Israeli mathematics education, students are divided into 3-unit, 4-unit, and 5-unit levels for the Bagrut (matriculation) exams. These "units" represent the depth and difficulty of mathematics studied.

Table 1 shows, that more than half of the participants are female. (61.5%). Furthermore, it can be seen that most teachers have a formal academic education (99.5%), with most of these participants having a master's degree (64%), while 33% have an undergraduate degree. Only few participants have a PhD degree (2.5%). As for teaching mathematics, it is evident that most teachers (61.7%) are integrated at different teaching levels and specifically teach all levels of study in mathematics. In contrast, close to a third (27.6%) of the teachers teach at the level of 3 units, while a minority teach only four or five levels (4.1% and 4.6%, respectively). The participants' age ranges from 22 to 72 years old, when the average age of the teachers approaches 50 years and they have a seniority ranging from two years to 55 years, with an average seniority in teaching of about 23 years.

3. Results

In case of the closed questions averages, standard deviations and ranges of the responses were calculated in case of each item. The results are presented in Table 2.

Table 2. Descriptive statistics for the research variables-teachers' sample

| Item | M | SD |
|--|------|------|
| Openness to new ideas from students | 4.59 | 0.54 |
| Knowing in advance what the lesson will look like and what it will learn | 3.92 | .640 |
| The positive effect of technology on teaching | 4.34 | .760 |
| Using Formative Assessment | 4.15 | 0.74 |
| Practice the material in groups | 3.76 | 0.75 |
| Using visualization in instruction | 4.17 | 0.67 |
| Using Reflection | 3.51 | 1.09 |
| Contribution of training courses to teaching | 3.94 | 0.85 |
| Enjoying Teaching Math | 4.88 | 0.33 |

It can be seen in Table 2 that teachers enjoy teaching mathematics and they are open to new ideas from students – these two items obtained the highest average.

As regarding the question about integrating mathematical content with other disciplines, most teachers (93.7%, 179 from 198 respondents) indicated that they would combine mathematics with other areas of teaching. Furthermore, the distribution of the areas that the teachers would combine with mathematics was examined. Almost half of the respondents (45% of the 195 respondents) would choose to combine mathematics with sciences. Others would combine mathematics with economics (10%), computers (8%), or technology and engineering (6%).

The responses to the open-ended questions were analyzed qualitatively using theme analysis. Themes and subthemes were identified, and the frequency of each subtheme's occurrence was calculated.

Table 3 contains the theme analysis for the question related to developing a positive attitude towards learning mathematics.

Table 3. Theme analysis for the question "How do you develop a positive attitude toward mathematics in your classroom?"

| Theme | Subtheme | Examples from the Text | Frequency |
|---|---|---|-----------|
| Showing the Value of Mathematics | Connecting Math to Real Life | "I always connect the questionnaire to our daily life and show the direct connection between math and everyday behavior." | 52 |
| | Interdisciplinary Teaching | "I combine math with sports, music, and geography." | 9 |
| | Demonstrating Mathematical Beauty and Logic | "I try to show them the beauty of math, how everything fits together." | 5 |
| | Historical and Cultural Context | "I tell them about the history of math and important figures." | 4 |

| | | | |
|--|---------------------------------------|---|----|
| Encouraging Engagement and Interest | Use of Games and Playful Learning | "I teach math using escape rooms, riddles." | 24 |
| | Hands-on Activities | "I build models with LEGO, I teach using origami." | 11 |
| Supporting Individual Needs | Personalized Attention and Support | "With a lot of patience and personal attention, I strive to help each student reach a score of 100." | 6 |
| | Boosting Confidence and Reducing Fear | "I try to reduce their fears and instill belief in themselves and in the subject." | 8 |
| Demonstrating Passion for the Subject | Teacher Enthusiasm and Passion | "I come to class very positively, with lots of motivation to show students that it's an amazing subject." | 7 |

Table 4 contains the theme analysis for the question related to showing the value of mathematics in life.

Table 4. Theme analysis for the question "How do you show students that learning mathematics is valuable for life?"

| Theme | Subtheme | Examples from the Text | Frequency |
|---|----------------------------------|--|-----------|
| Practical, Real-World Applications | Everyday Life | "Shows them that even reading a graph in the newspaper requires basic mathematical knowledge." | 32 |
| | | "Brings examples from real life like the corona pandemic and exponential functions." | |
| | Real-World Applications | "Shows them examples of inventions by scientists that could not have been without mathematics." "Shows how math is used in real-world problems like medical graphs, economics, and analyzing trends." | 35 |
| Career Relevance | Future Careers | "Explains that mathematics is the basis for various fields such as engineering, physics, and medicine." | 18 |
| | Interdisciplinary Connections | "Connects mathematics to fields such as engineering, electricity, and even education." | 16 |
| Cognitive Skills | Development of Thinking Skills | "Explains that math develops thinking, such as learning logic, seeing beyond steps, and solving problems." | 21 |
| | | "Teaches them that math helps develop logical thinking and strategic decision-making." | |
| | Problem Solving | "Various solutions to the same problem" | 12 |
| Educational Value | Foundation for Further Education | "Explains that math is the basis for future studies, including in higher education." | 15 |

Table 5 contains the theme analysis for the question related to the development of students' creativity in learning mathematics.

Table 5. Theme analysis for the question "What strategies do you use to develop students' creativity in learning mathematics?"

| Theme | Subtheme | Examples from the Text | Frequency |
|-------------------------------------|------------------------------------|---|-----------|
| Problem-Solving Flexibility | Multiple solution paths | "I ask them to solve the problem using more than one method." | 23 |
| | Alternative strategies | "I encourage them to think of additional ways to solve." | 16 |
| | Flexible thinking / Out-of-the-box | "I try to encourage out-of-the-box thinking." | 7 |
| Open Inquiry and Exploration | Open-ended questions | "Open-ended questions." | 64 |
| | Research and discovery | "Inquiry and discovery." | 58 |
| | Project-based learning (PBL) | "PBL, exploration and presentation to the class." | 6 |
| | Games | "Games." | 76 |

| | | | |
|--------------------------------|---------------------------------|---|----|
| Engagement Through Play | Escape rooms | "Escape rooms." | 18 |
| | Quizzes and challenges | "Quizzes." | 13 |
| Real-Life Relevance | Examples from daily life | "I give many examples from everyday life." | 16 |
| | Personal relevance | "Through their hobbies." | 5 |
| | Societal/current issues | "Current real-life events." | 3 |
| Collaborative Learning | Group work | "Group work." | 51 |
| | Class discussion / debates | "Class discussion." | 39 |
| | Peer teaching / shared thinking | "I ask students to write a lesson and teach it in class." | 2 |
| Technology and tools | Educational tools | "Desmos and GeoGebra." | 2 |
| | Digital media | "Searching in digital media." | 22 |
| | Educational videos | "Demonstration videos." | 2 |

Table 6 contains the theme analysis for the question related to differentiating teaching.

Table 6. Theme analysis for the question "How will you tailor your mathematics teaching to each student and how will you address the differences between students?"

| Theme | Subtheme | Examples from the Text | Frequency |
|--------------------------------|---|---|-----------|
| Personalized Attention | One-to-One Instruction | "Personal attention and individual hours" "I will ask personal questions, like 'Did you understand? Do you need help?'" | 44 |
| | Personalized Instruction Based on Student's Needs | "I tailor the instruction according to personal needs" "I will adjust to the level of understanding of each student" | 12 |
| | Help for struggling students | "I offer patience and additional help for weaker students" "I will give personal help to struggling students" | 9 |
| | Personalized Reflections and Follow-up | "I will ask students reflective questions like 'How was the task for you?'" "I will reflect on their responses personally" | 6 |
| Differentiated Tasks | Tailoring Tasks Based on Student's Level | "I give graded tasks according to the level of the student" "Graded exercises" "Different exercises for each student" | 37 |
| | Small Group Instruction | "I use small, homogenous groups based on ability level" "Small groups for differentiated tasks" | 17 |
| | Progressively Difficult Tasks | "I give tasks with increasing levels of difficulty" "I use graded exercises, tasks of varying difficulty" | 12 |
| Varied Teaching Methods | Use of Various Pedagogical Tools | "I use a variety of teaching methods" "I will show different working strategies so each student can choose what suits them" | 20 |
| | Digital and Technological Resources | "I use Photoshop for spatial vision" "I use different technological tools to support students' learning" | 5 |

4. Discussions

The discussion is structured around the research questions.

4.1. Do teachers enjoy teaching mathematics?

The responding teachers enjoy teaching mathematics, most of the teachers assigning level 5 on a 5-level Likert scale to the affirmation "I enjoy teaching mathematics" ($M = 4.88$, $SD = 0.33$). Analyzing teachers' answers to the open questions shows that they demonstrate passion and enthusiasm in teaching mathematics.

4.2. How do teachers develop a positive attitude towards learning mathematics?

The analysis shows that teachers build a positive attitude toward mathematics mainly by linking it to real life. By regularly connecting lessons to everyday situations, they help students view math as

practical and meaningful. This supports Boaler's (2016) findings, which highlight how real-world applications can strongly motivate learners. Also, showing the utility of mathematics in other disciplines fosters a positive attitude towards learning mathematics, as demonstrated by Asli and Zsoldos-Marchis (2023a). Additionally, many teachers promote engagement by using games, playful learning, and hands-on activities, which aligns with research by Blumenfeld et al. (1991) on the importance of active, student-centered learning for building positive emotions towards academic subjects. Previous research has also highlighted the value of gamification and games in fostering positive attitudes toward mathematics (Zsoldos-Marchis, 2020a; Zsoldos-Marchis, 2020b). Supporting individual needs, such as offering personalized attention and helping students overcome fear, also emerged as a key strategy, resonating with Dweck's (2006) work on developing growth mindsets to improve attitudes toward learning. Teachers' demonstration of passion and enthusiasm further mirrors findings by Frenzel et al. (2009), who showed that teachers' emotional expressions significantly impact student motivation. Overall, the results suggest that teachers cultivate positive attitudes by blending relevance, emotional support, active learning, and personal inspiration—strategies consistently supported in educational research.

4.3. How do teachers show to their students that leaning mathematics is valuable for their life?

The thematic analysis indicates that teachers emphasize the value of mathematics by making it practically relevant, cognitively enriching, and foundational for future opportunities. The most frequent strategy involves drawing on practical applications in everyday life, such as interpreting graphs, understanding exponential growth during events like the COVID-19 pandemic, or recognizing the mathematical foundations behind technological advancements. This approach reflects research emphasizing contextualization as a key motivator for students, helping them perceive mathematics as meaningful and applicable (Boaler, 2016; Freudenthal, 1991).

Teachers also connect mathematics to career paths and interdisciplinary fields, highlighting its importance in professions such as engineering, medicine, and technology. This aligns with findings that career relevance significantly increases students' interest and persistence in mathematics, particularly among adolescents seeking real-world utility in their studies (Eccles & Wigfield, 2002; Watt et al., 2012).

A notable emphasis is placed on cognitive development, with teachers explaining how mathematics sharpens logic, reasoning, and strategic thinking. These justifications mirror studies showing that students' appreciation for mathematics often increases when they understand its role in developing transferable intellectual skills (Niss & Højgaard, 2011).

Teachers also demonstrate the value of math through real-world problem-solving, including financial literacy and current events. These strategies are consistent with calls for integrating mathematical literacy into curricula to prepare students for informed decision-making in daily and civic life (OECD, 2019a; OECD, 2019b).

In summary, the responses show that teachers strive to bridge school mathematics with real-life meaning, future relevance, and intellectual growth, strategies that research consistently supports as essential for increasing student motivation and perceived value of learning mathematics.

4.4. What strategies do teachers use to develop students' creativity in learning mathematics?

The thematic analysis shows that one important way of developing creative thinking during mathematics classes is promoting problem-solving flexibility, such as encouraging multiple solution paths and alternative strategies, which aligns with research emphasizing the role of divergent thinking in mathematical creativity (Leikin, 2009). By using flexible approaches and out-of-the-box thinking, teachers help students see mathematics as a space for exploration rather than rigid procedures.

The frequent use of open inquiry, including open-ended questions and inquiry-based learning, supports creativity by allowing students to explore mathematical concepts without predetermined answers. These practices are supported by studies showing that open-ended and inquiry-based tasks enhance both creativity and deep mathematical understanding (Liljedahl et al., 2021).

Another approach is to increase engagement through play, including games and escape rooms. Research suggests that incorporating game-based learning in mathematics can stimulate students' curiosity, foster experimentation, and enhance creative problem-solving (Bragg, 2007).

Strategies like using real-life relevance, collaborative learning, and technology tools promote authentic contexts, social construction of knowledge, and digital literacy as essential for developing creativity (Sawyer, 2012; OECD, 2019b).

4.5. How do teachers personalize their teaching to each student?

The thematic analysis highlights that teachers personalize mathematics instruction through a multifaceted approach grounded in personal attention, differentiated tasks, and varied teaching methods. The most frequently reported strategy is one-to-one interaction, where teachers engage students with direct questions and targeted support. This aligns with formative assessment practices, where ongoing dialogue helps teachers identify student needs and adjust instruction in real time (Black & Wiliam, 2009).

A key component of personalization involves tailoring instruction based on individual readiness, offering graded exercises and small-group work that respond to students' cognitive levels. This reflects Tomlinson's (2014) model of differentiated instruction, which emphasizes adapting content, process, and product to maximize each student's growth. Research shows that differentiated instruction not only improves learning outcomes but also enhances engagement and self-efficacy in mathematics (Suprayogi et. al, 2017).

Teachers also report using progressively difficult tasks, allowing students to build confidence while developing deeper understanding, an approach supported by Vygotsky's zone of proximal development, where optimal learning occurs just beyond a student's current capabilities with appropriate support (Vygotsky, 1978).

Finally, the use of varied pedagogical methods, including digital tools and visual aids, supports the development of multiple representations and learning pathways, which accommodate diverse learning styles (Meyer et. al, 2014).

In sum, teachers personalize their teaching by blending individual support, differentiated content, and adaptive teaching strategies, effectively aligning with contemporary educational theory and best practice in mathematics education.

5. Conclusions and implications for future research

The findings of this study paint a comprehensive picture of mathematics teachers as passionate, reflective, and student-centered practitioners. Teachers express a deep enjoyment in teaching mathematics, and this enthusiasm translates into dynamic classroom strategies that emphasize both cognitive and emotional dimensions of learning. Their commitment is evident in how they strive to create meaningful, engaging, and inclusive learning environments.

A key theme in the teachers' responses is the personalization of instruction. They adapt lessons through one-on-one support, differentiated tasks, and flexible teaching methods. This approach not only improves learning outcomes but also helps reduce math anxiety and encourages positive attitudes. By addressing individual needs, teachers build trust and motivation, which strengthens students' confidence and persistence—skills essential for success in mathematics.

Teachers also stress the importance of showing the relevance of mathematics in real life, from everyday decisions and financial literacy to career opportunities and technological advances. These practical links increase motivation and help students appreciate the long-term value of mathematics.

Creativity is promoted through open-ended questions, problem-solving with multiple methods, games, group work, and the use of digital tools. Such activities encourage exploration, curiosity, and innovative thinking, while keeping students engaged.

Overall, the strategies used by teachers—personalization, real-life connections, creative tasks, and emotional support—align with proven educational practices. Their work demonstrates that effective

teaching is not only about delivering content but also about inspiring students and making mathematics meaningful and accessible.

The limitation of this research is that the questionnaire didn't contain questions related frequencies of using different methods mentioned by teachers, which can change the ideal picture revealed from the participants' answers. It could happen that some of the teachers don't use frequently the methods and approaches mentioned by them due to some barriers or curricular constraints.

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Authors

ZSOLDOS-MARCHIS Iuliana, Babes-Bolyai University, Cluj-Napoca (Romania). E-mail: Iuliana.marchis@ubbcluj.ro

LONDON Einav, Babes-Bolyai University, Cluj-Napoca (Romania). E-mail: einavlondon42@gmail.com

Appendix. Questionnaire for teachers about approaches for teaching mathematics

Dear Teacher,

The survey is designed to understand your approach to teaching mathematics.

The survey is anonymous and is for work purposes only.

Thank you for your cooperation.

How do you develop a positive attitude toward math and science in your classroom?

How do you show students that learning mathematics is valuable for life?

What strategies do you use to develop students' creativity in learning math and science?

What are your hobbies and how do you incorporate them into teaching math?

For each of the following statements, please indicate the extent to which you engage in the described behavior, using a scale from 1 (not at all) to 5 (to a very large extent).

| Question | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| To what extent are you open to receiving new ideas from students? | | | | | |
| When you enter the classroom, to what extent do you know what the structure of the lesson will be and what you will learn during the lesson? | | | | | |
| To what extent does the integration of technology into teaching affected your teaching style? | | | | | |
| Do you evaluate students with formative assessment, i.e.: small tests, projects, new ideas, etc.? | | | | | |
| To what extent do you practice the material in groups? | | | | | |
| To what extent do you use visual aids? | | | | | |
| To what extent do the assignments you prepare use reflection tools? | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| How do training courses contribute to teaching mathematics in a meaningful, attractive way? | | | | | |
| To what extent do you enjoy teaching mathematics? | | | | | |

How will you tailor math instruction to each student and how will you address differences between students?

What do you think are the three most important things to pay attention to in order for there to be learning in the classroom?

Would you combine mathematics with other fields? If so, which fields? If not, why not?

Finally, a few questions for statistical purposes only.

Are you male or female?

- female male refusing

Please indicate your age in years: _____

Formal education level

- B.A M.A Doctoral degree Others: _____

Please indicate your teaching experience in years: _____

What levels of mathematics do you teach?

- Three units Four units Five units All units
 Others: _____

The online questionnaire in Hebrew can be consulted here:

https://docs.google.com/forms/d/e/1FAIpQLSd1y4pSrPSS6HQ11b3jUfgr50TSVuWR_-whzeaYFi-XHmWUHQ/viewform