



International report on GATE Survey Research "The image of a 21st century teacher in educating gifted students"

Content developed from the information gathered from National Reports Prepared by Anita Kelava and Vida Drąsutė, VšĮ "eMundus"

1.Context

The pressure of globalization, economic competitiveness and unsatisfactory results of students performance have led to increased focus on academic achievement of gifted and talented pupils.

According to EU policy framework in regards to education, it is a top priority to establish effective educational practices in order to maximize productivity and continued innovation.

In the last decades there has been a consisted increase in the interest towards the issues of underachievement of gifted and talented pupils. The current shift in the nature of current economy and rapid advantages in technology have led to major transformation in the required fields and job qualifications, with 75% of fastest growing occupations requiring skills and knowledge in science, technology, engineering and mathematics (STEM). Educating gifted and talented student is crucial in this area as they could potentially be the future eminent path breakers and innovators (Subotnik & Rickoff, 2009).

Underachievement of gifted and talented is a common phenomena that needs to be addressed. Gifted student population has specific needs, requiring specific teaching methods and a tailored challenging learning environment.

According to the source they seem to score less in self-reported level of motivation and relevant indicators of motivation such as achievement ambition, cognitive motion and joy for thinking. (Schick& Philipson, 2009). Regarding the emotion sphere, gifted students seem to be feeling higher levels of anxiety to academic results and low emotional engagement.

Research has shown that the true development of a child I.Q. level is constructed from 3 main elements:

I.Q. = Heritage (40%) + Environment (40%) + Heritage/environment (20%)

therefore that means a great deal of developing student intelligence its on the teachers as they are the ones who are in charge of emotional development and cognitive skills of the pupils. The environment of the child is very relevant aspect in self growth, skills development and child motivation.





The formula to success in teaching gifted pupils is:

Success = adequate teacher + good teaching skills + good relationship.

Most teachers are still lacking skills and competence necessary to provide gifted and talented students with the adequate support to express their abilities, feel motivated, learn and grown in surroundings that know how to stimulate them. In order to improve teachers' educational program, it is required to do prior identification of their professional competences. The proper research is needed in order to emphasize the way of tracing and selecting those teachers and the gap needed to be closed in order to bringing them to full effective performances in the classroom.

2. About the project

Project GATE "Teachers Training Program to Support Gifted and Talented Students" is an international project funded by European Union under the Erasmus+ program's Key action 2: Cooperation among Institution in the field of school education.

The main goal of the GATE projects is to enhance the competencies and skills of primary education teachers and mentors to help gifted and talented pupils (age 8-11 y.o) develop their full potential. To fulfill this wide goal, the project also foresees the attainment of the following 4 specific objectives.

- To design an innovative teaching methodology for GATE pupils.
- To provide a training program for primary education teachers.
- To increase the academic performance of "gate underachievers" in STEAM subjects.
- To increase awareness among teachers, educators, school staff, public authorities, and education experts about GATE students.

The projects gathers 5 partners from 4 different countries: VšĮ "eMundus" (Lithuania), Vytautas Magnus University (Lithuania), ISMA University (Latvia), Zinev Art Technologies (Bulgaria) and Ron Vardi Center (Israel).

Duration of GATE project: 01.01.2022 – 30.04.2024

3. Introduction and methodology of Survey and Reports

The survey "The image of a 21st century teacher in educating gifted students" was carried out during the implementation of the international project GATE ("Teachers Training Program to Support Gifted and Talented Students") as a part of R1 (Result 1): GATE Methodological Material: a new teaching methodology for GATE students that merge Socio-emotional learning and the STEAM approach with the aim to create teachers' training program which was part of R2: GATE Training Program, a training program for primary education teachers on the methodology devised. In order to accomplish that it was necessary to do a research, in this specific case using





method of questionnaire which was one of the important steps in designing and implementing teaching methodology and training program for projects target group: teachers/educators/mentors dealing with GATE pupils.

In order to create training course for teachers it was important to obtain all the information from the teachers regarding their knowledge, expectations, obstacles, challenges, opinions, experience and qualifications in dealing with gifted students and talented pupils, with the special focus on STEM approach and SEL (social and emotional learning) approach which is cornerstone of the teachers training program.

The survey was conducted online using Google Forms in almost all the partner countries (Lithuania, Latvia, Bulgaria) with 122 teachers and educators sharing their experiences.

Focus group discussions and interview were organized in Israel with 20 teachers who were individually interviewed and 4 focus groups with 5 teachers each. Overal 40 teachers participated which makes final number of 164 teachers/ educators/ mentors who participated in the research.

Questionnaire was consisted of mixed types of questions, open and closed (qualitative and quantitative). It was prepared by GATE project team in the initial period of the project.

In order to get proper results, it was needed to combine subjective approach on the subjects, self-estimation of knowledge with relevant, objective facts.

The consecutive items were questioned:

Sociology-demographic information's, Teachers' views on the education of gate children (STEAM methodology+ Socio-Emotional Learning (SEL), Teachers experience with gifted children and Teachers' views on 21st-century skills.

The leading partner of the Result1, which was Ron Vardi center (Israel) took different approach and did qualitative research **using method of focus group and interview**. They gathered open answers from the teachers in order to get their vision and idea of what are the requirements of educators dealing with gifted pupils and which qualification and skills should they possess. **The discussion consisted of two main questions**:

- 1. What is the image of the gifted children teacher at the end of the first quarter of the 21st century, in terms of education, personality, character, approach, skills and abilities?
- 2. Referring to your answer to previous question what should be added to current education and training of teachers to comply with the image you presented?

The results of this focus group are presented separately in Israeli National report.

4. Definitions and terms

The ensuing terms were used and presented in the survey:





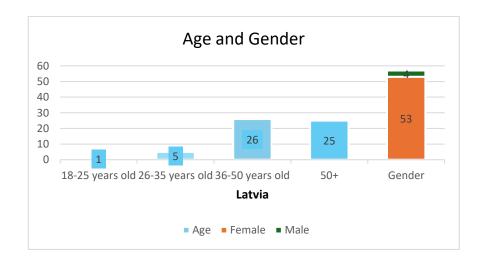
- Gifted students:
- I. "Pupils with an IQ of at least two standard deviations above the mean (at least 130 IQ)"
- II. " Pupils who perform or have the opportunity to perform tasks and activities at a higher level than their peers"
- Social-emotional learning (SEL) "the process during which children and adults acquire knowledge, attitudes, skills and competences in the following areas: understanding and managing their emotions, setting and achieving positive goals, caring for others, building positive relationships with others and support, appropriate management of interpersonal relationship situations, responsible decision-making".
- GATE Pupils this questionnaire uses this term to refer to one of the target groups of the GATE project gifted students.
- The STEAM education method is defined as "an educational, integral learning method aimed at complex cognition, application and problem solving of real-world phenomena by developing students' abilities in the context of natural sciences, technology, engineering, arts and mathematics and helping to direct students' questions, dialogue and critical thinking in the right direction ".

5. Survey research results

5.1 a) Sociology-demographic information's

The first part of the questionnaire (questions 1-8) covered background and basic information's about teachers such as gender, age, years of teaching, field of teaching, and institution where they are teaching. The results are following:

Latvia: 53 female and 4 male school teachers participated in the survey, the biggest part of respondents belongs to the age group 36-50 (26 people), 25 people belong to age group 50+, 5 teachers are in the age group 26-35, and one teacher is in the age group from 18 till 25 years of age.

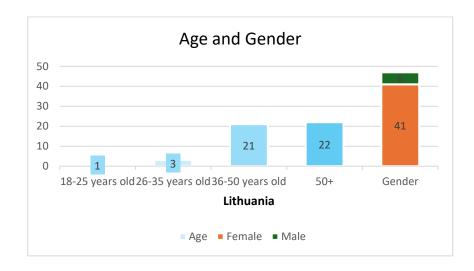






Years of teaching experience: The results of the survey show that the biggest part of respondents (37 people) work in teaching for more than 15 years, 8 respondents have experience of teaching between 6 and 10 years, 7 of them are not that experienced yet and teach for 1-5 years, and the smallest quantity of respondents replied that they teaching experience is 11 - 15 years. So, we can conclude that people working with target age group students are quite experienced having more than 15 years of experience in teaching.

Lithuania: Of the 47 respondents, 41 (87.2%) are women and 6 (12.8%) are men. Concerning their age range: 46.8% are over 50 years old and 44.7% are between 36-50 years old. The remaining 6.4% and 2.1% are in the range of 26-35 years old and 18-25 years old



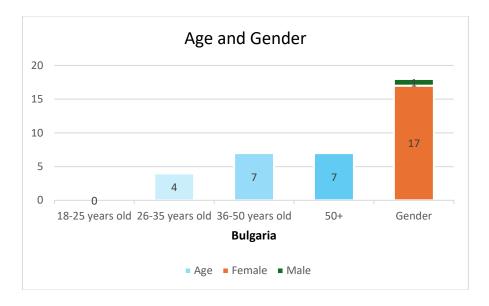
Years of teaching experience: 68.1% claimed to have more than 15 years of teaching experience, and 14.9% claimed to have between 10-15 years of experience. The same percentage reported having 1-5 years of experience. The remaining 2.1% declared having between 6-10 years of experience.

Bulgaria: Out of 18 participants 94.4 % (17) of the respondents were female.

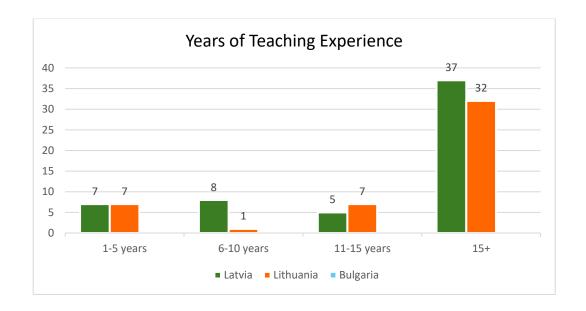
The respondents' age range is 26-50+, with almost 40% being over 50+ and 40% being in the age group between 35-50. which suggests that most of the teachers have a lot of experience (most had over 15 years of experience).







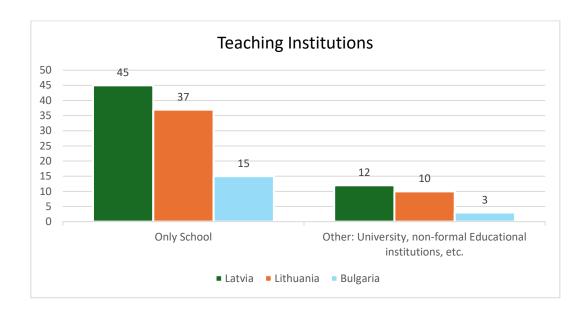
Out of 122 teachers who filled out the questionnaire, 111 were woman and only remaining 11 were man: As we can see the analyzed sample is mostly composed out of female teachers with a long experience in their field of works, most of them having over 15 years of experience.





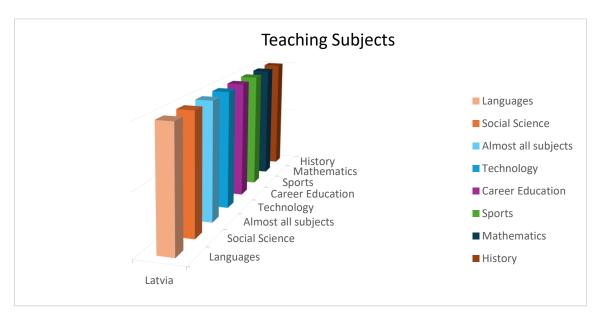


5.1 b) Subjects of teaching and teaching institutions:



Latvia:

19 teachers are teaching Languages (Latvian or English), 5 of them teach Social sciences, 8 are involved in teaching other science, 10 respondents noted that they are primary school teachers and they teach almost all the subjects except sports. 5 teachers are teaching Technology, 1 in involved in teaching Career education, 3 are sports teachers, 5 of respondents replied that they teach Mathematics, and only one respondent teaches History to children in the target age group.



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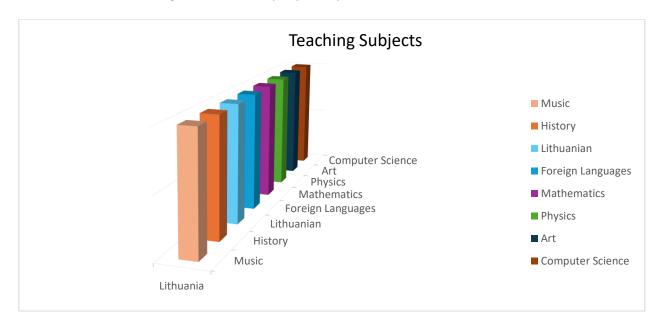
It becomes evident from survey results that most of teachers work in different school grades, starting from the first and till grade 12. Only 41 respondents teach in the grades where there are students of the age 8-12, our target age group.

Next question was directly connected with age range of students. According the responses received, only 30 teachers are working constantly with age group 8-11 years. Other respondents work with this age group from time to time, as their major is another subject taught in other grades.

45 teachers teach exclusively at school, 12 teach not only in schools, but in other educational establishments -2 of respondents teach in higher educational establishment (University), 5 of them teach in Training centers, others (5) have chosen the answer - other.

Lithuania:

Fair variety of responds has emerged, with as many as 8 subjects. The participants teach *music*, *history*, *Lithuanian*, *foreign languages*, *mathematics*, *physics*, *art*, and *computer science*. 57.4% of respondents teach in grades from 1 to 12, while the remaining 42.6% work only in primary schools.



The vast majority 78.7% teach only in schools, but a considerable minority (21.3%) work also at higher education institutions, in non-formal education centers, centers for gate children, and others. *The following numbers* show the distribution of the percentages:

- 31.6% gifted centers
- 5.3% higher education institutions
- 21.1% non-formal education institutions

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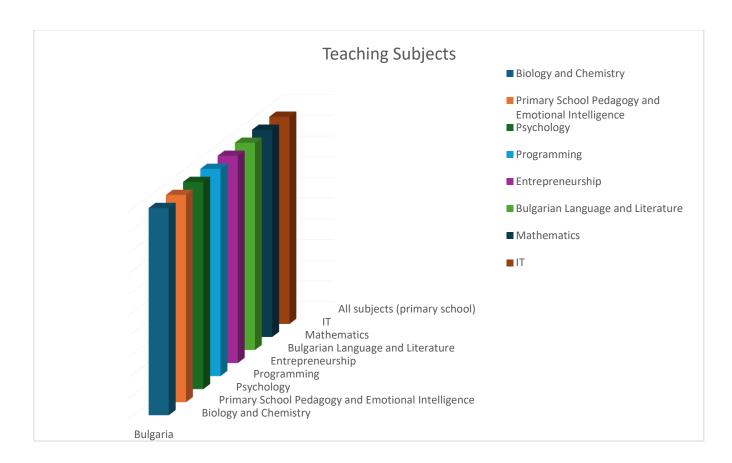




• 52.6% - Other

Bulgaria

The teaching subjects and areas of expertise varied: Biology and chemistry, primary school teachers, primary school pedagogy and Emotional intelligence, psychology, programming, Entrepreneurship, Bulgarian language and literature, mathematics, IT and others.



The results in terms of grades of teaching, the answers were equally distributed, with a slight elevation for those teaching 1-4 grades. The same was applicable for the age range of the students. Over 83% only teach at school.

There is a smaller number of teachers who beside schools work also in other institution. The other implies on: sports centers, secondary schools (progymnasiums), remedial classes, mainly work privately (give private lessons to students of different age), universities and educational centers.





Conclusion of the first part:

Gender Distribution in the Questionnaire: The data from the questionnaire reveals a significant female majority among the participants. This finding suggests that women are more inclined toward the teaching profession than men. Their active participation in the survey underscores their commitment to education and their role in shaping young minds.

Background Information and Target Group Profile: Understanding the context and profile of the target group is crucial. Most of the learners in this scenario are experienced and professional, which implies that we are not dealing with beginners. Their diverse backgrounds and areas of expertise present a challenge: there are no common parallels in subjects. However, this diversity also provides an opportunity to create a rich and multifaceted teaching program.

Objective Guidelines and Common Ground: Given the wide range of subjects, it is needed to establish objective guidelines that can be universally applicable. These guidelines should focus on fundamental principles, critical thinking, and problem-solving skills. By identifying common ground across various disciplines, we can create a cohesive framework that benefits all learners.

Pupils' Age and Grades: Another critical factor is the age of the pupils and the specific grade levels the teachers are addressing. Considering both the mental and physical age of the learners is essential. Therefore, methodology should be adaptive, ensuring that the applied techniques are not only effective but also engaging and relevant to the learners' developmental stage.

In summary, a thoughtful and adaptable approach—one that acknowledges learners' experience, considers diverse subject areas, and accounts for age-related factors—will lead to a successful teaching program.

5.2. Teachers' views and knowledge on the education of gate children, STEAM methodology, and Socio-Emotional Learning (SEL)

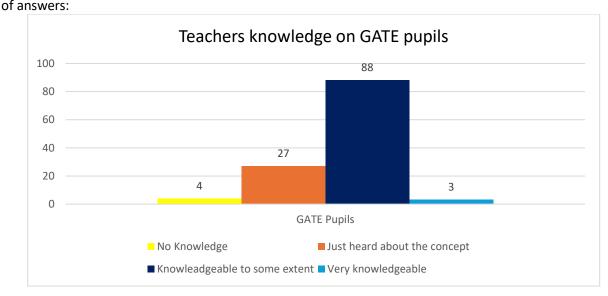
The following set of question consisted out of 3 expanded questions (mixed types: closed questions and open questions for elaboration of the responses). The topics were: teachers theoretical knowledge regarding the GATE pupils, STEM methodology and SEL methodology; teachers practical experiences with STEM and SEL methodology. As these three educational practices play a pivotal role in the training methodology that will be devised, the answers received in this section provide the whole partnership a better understanding of what the teachers need to learn to successfully teach Gate students.





With the respect of topic of GATE pupils, the results were consecutive:

	Very knowledgeable Knowledgeable to some extent		I just heard about this concept	No knowledge
Latvia	3 answers	36 answers	16 answers	2 answers
Lithuania	0	38	8	1
Bulgaria	0	14	3	1
Total number	3	88	27	4



These results lead to conclusion that the biggest part of teachers, working with children in the age group from 8 till 11, are familiar or heard about the topic of gifted and Talented pupils, but they are lacking expertise.

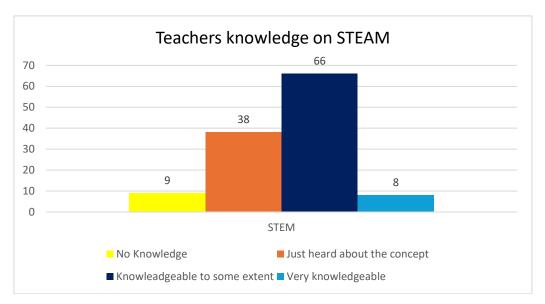
STEAM methodology

The following table shows teachers level of knowledge regarding the STEAM (Science, Technology, Engineering, Art, Math) methodology. The responses are following

	Very knowledgeable Knowledgeable		I just heard about	No knowledge
		to some extent	this concept	
Latvia	4 answers	18 answers	27 answers	8 answers
Lithuania	3	34	8	1
Bulgaria	1	14	3	
Total number	8	66	38	9
of answers:				







As the results indicate, majority of teachers either just heard about the concept of STEAM or they are knowledgeable to some extent, which means there is a gap that needs to be filled in order to make teachers adequate mentors who can implement STEM into their teaching methods; only 8 participants consider themselves expert in the area and 9 of them never heard of the concept or do not possess any knowledge.

Importance of STEAM Methodology: A Teacher's Perspective

On a scale from 1 to 10, where 1 signifies "not important" and 10 represents "very important," the responses from educators were overwhelmingly positive. Most teachers rated the importance of STEM (Science, Technology, Engineering, and Mathematics) as exceptionally high. Here are the key insights and conclusion based on the comments:

1.STEAM Methodology and Critical Thinking:

- •The STEAM methodology empowers gifted children to strengthen their critical thinking. By integrating technical subjects, students can apply their knowledge in practical contexts.
- •It allows for a holistic view, encouraging learners to see these disciplines as interconnected rather than separate chunks of knowledge.

2.Connections Between Disciplines:

- •When working with the STEAM method, educators can illuminate connections between different subjects. This approach simplifies complex theories and makes learning more practical.
- •By bridging gaps and showing real-world applications, teachers enhance students' understanding.





3.Balancing Teaching Methods:

- •Achieving a balance between different teaching methods is essential. While large schools with established STEAM classrooms benefit from robust material resources, smaller settlements face limitations.
- •Curricula and school organization should actively stimulate talented children's discovery and development. Every child has unique talents waiting to be nurtured.

4.Inclusivity and Motivation:

- STEAM environments predispose students to creative thinking. Regardless of whether they are categorized as "gifted," every student can express their talents, creativity, and abilities.
- Active participation and practical learning motivate gifted students. Innovative teaching methods are crucial for their growth.

5. Education's Goals and Methodologies:

- •Education should prioritize the development of creative talents in children and adolescents. Conservative systems should not suppress these talents.
- •Any methodology that sparks interest in learning, encourages creativity, and fosters problem-solving is valuable.

Conclusion: In summary, the STEAM methodology transcends traditional boundaries, nurturing gifted students while benefiting all learners.

SEL methodology

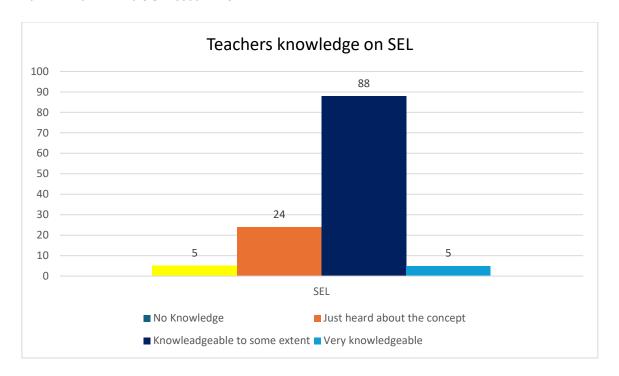
The following section was measured the same way as the previous part of questionnaire, just here it was regarding the knowledge and importance of SEL methodology.

The table shows teachers level of knowledge regarding the SEL (social emotional learning) methodology. The responses are the following:

	Very knowledge	eable Knowledgeable to some extent	I just heard about this concept	No knowledge
Latvia	2 answers	35 answers	18 answers	2 answers
Lithuania	1	39	6	1
Bulgaria	2	14	0	2
Total number of answers:	5	88	24	5







The level of knowledge of concept and methods appears to be much higher in SEL then in STEAM.

Importance of SEL Methodology: A Teacher's Perspective

On a scale from 1 to 10, where 1 signifies "not important" and 10 represents "very important," the responses from educators were overwhelmingly positive. Most teachers rated the importance of SEL (Social-emotional learning) as exceptionally high, although a bit lower in score then STEAM importance.

In order to elaborate their responses, they provided their opinion and comments on why is SEL important when dealing with GATE pupils. Based on the comments the next key insights and conclusions are derived:

Key observations:

- •Talented children exhibit high empathy.
- •Emotional attitude toward creativity is foundational for success.
- •Developing emotional intelligence and social skills is essential.
- •All-round development includes self-knowledge and healthy relationships.
- •SEL is an active teaching process, vital for every teacher and pupil.





1.Emotional Stability and Learning Outcomes:

- •To achieve higher learning outcomes and go beyond, a child's emotional stability is paramount. Feeling safe and balanced allows them to thrive.
- •Proper recognition and management of emotions enable better adaptation, self-understanding, and self-control. These positive effects extend to all aspects of life, including academics.

2. Emotional Safety and Motivation:

- When a child feels emotionally safe, able to communicate, and collaborate, their motivation to learn significantly increases.
- Encouraging self-expression, creativity, and emotional openness fosters success, especially when teaching gifted children.

3.Self-Discovery and Abilities:

- •Knowing oneself, discovering abilities, expressing opinions, and participating in project activities are crucial.
- Fearlessly revealing emotions and embracing creativity leads to great achievements. This mindset is especially impactful for gifted students.

4. Teachers' Experience and Practices:

•Most respondents demonstrate up-to-date knowledge of educational practices.

Conclusion: The Intersection of STEAM and SEL

1. Understanding the Importance:

Teachers recognize the critical role of both STEAM (Science, Technology, Engineering, and Mathematics) and SEL (Social and Emotional Learning) methodologies. Despite their potential gaps in expertise, educators grasp the fundamental importance of creating a safe learning environment where children can freely express their feelings.

2. Safe Learning Environment:

Emotional safety is the cornerstone of effective education. When students feel secure, they are more open to learning and exploration. Furthermore, SEL provides tools for recognizing and managing emotions, fostering empathy, and promoting positive interactions.

3. Guidance Toward Full Potential:

To unlock a child's full potential, proper guidance is essential. Teachers play a pivotal role in nurturing talents, creativity, and self-awareness. SEL equips pupils with emotional intelligence, resilience, and interpersonal skills—vital components for holistic development.





4.STEAM: Beyond the Curriculum:

STEAM methodology extends beyond the regular curriculum. It ignites curiosity, engages young minds, and encourages exploration. By combining elements from various disciplines, STEM keeps pupils intellectually stimulated. It introduces novel methods and real-world applications.

Teaching experience

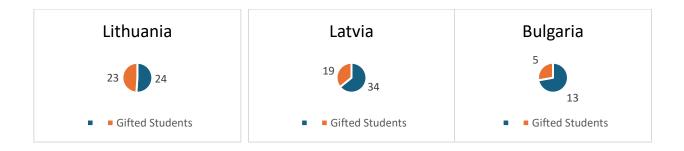
Regarding the teaching experience, over 72,3% of Lithuanian respondents have teaching experience either with gifted children or with using STEM or SEL methodology. Most of them acquired their experience through professional courses or seminars.

In Latvia and Bulgaria over 80% of the respondents have not directly worked on SEL, STEAM or with gifted students. The teachers who have the experience, acquired their knowledge in seminars, conferences, self-education, training's and educational programs.

In summary, the convergence of STEM and SEL creates a powerful synergy. While teachers may not be experts in these fields, their commitment to fostering safe, supportive environments ensures that gifted pupils thrive.

5.3 Teaching gifted and talented pupils

The following section questioned presence of GATE pupils in teachers classrooms, practices that school implements as well as difficulties that teachers are facing when dealing with GATE pupils.

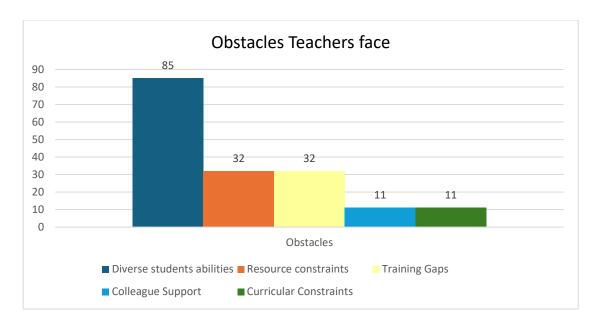


As it turns out almost half of the Lithuanian teachers have gifted student (according to the official definition from the beginning), 19 teachers from Latvia have gifted students in their classroom and 5 out of 18 Bulgarian teachers have officially recognized gifted student.

The teachers with GATE pupils identified the following challenges in classroom:







1.Diverse Student Abilities/Mixed Classes and Balance:

The presence of students with vastly different abilities poses a significant challenge. Balancing the needs of both struggling learners and high achievers is complex. Nearly 70% of teachers highlighted this difficulty. It requires personalized approaches and differentiated instruction. Finding the right balance—challenging the gifted while supporting struggling learners—is an ongoing endeavor.

2. Resource Constraints:

26.1% of teachers expressed concern about resource scarcity. Limited access to materials, technology, and teaching aids hampers effective instruction resulting in hinder creativity and innovation in the classroom.

3.Training Gaps

26.1% of teachers reported lack of training. Adequate professional development is crucial for staying updated on effective teaching methods. Continuous learning ensures teachers are well-equipped to address diverse student needs.

4.Colleague Support:

8.7% of teachers mentioned the need for colleague support. Peer mentoring, sharing best practices, and teamwork enhance teaching effectiveness and foster growth.

5.Curricular Constraints:

8.7% of teachers grapple with the constraints of national curricula. Striking a balance between prescribed content and student-centered learning can be challenging.





In terms of school practices in relation to gifted students in Latvia 32 teachers consider that their school adopts some practices for Gifted and Talented students, 25 stated that their school is not using any practices for Gifted and Talented students; in Lithuania more than half of the teachers answered that their school is providing additional practices for GATE pupils; and in Bulgaria half of the participants stated that their institution is providing practices for GATE pupils.

The examples of various practices within educational context are:



1. Differentiated Learning:

Adopting differentiated learning involves tailoring instruction to meet the diverse needs of students. For gifted pupils, this means providing more complex tasks, challenging projects, and opportunities for deeper exploration.

2. Specific Groups for Gifted Students:

Creating specific groups within classes allows gifted students to collaborate, share ideas, and engage in advanced discussions.

3.Inclusive Education Support Project:

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The Inclusive Education Support Project aims to create an environment where all students, including the gifted, feel valued and included.

4. Interest Activities, Clubs, and Studios:

Extracurricular activities such as clubs, studios, and interest-based projects allow gifted students to explore their passions.

5. Competitions and Contests:

Encouraging student participation in competitions and contests provides a stimulating challenge.

6.Commission for Gifted Children:

The Commission for Gifted Children advocates for policies and practices that support gifted education. It also ensures that gifted students receive appropriate resources and opportunities.

7.Individualized Approaches:

Teachers' individualized approaches (personal guidance) recognize each talented student's unique strengths and areas for growth.

8. Student Leadership and Projects:

Involving pupils in projects and Olympiads empowers them to take ownership of their learning.

As per results of the survey, teachers are confronting many institutional obstacles in dealing with gifted pupils. There are certain limitations in resources, space, time and emotional and institutional support. The gifted children are all around us, as survey results indicates many teachers have a GATE pupil/pupils in their classroom. Beside the institutional limits, there is also lack of knowledge on how to motivate and deal with GATE pupils, the special approach is certainly required and teacher training course must be priority and necessity in all the schools.

5.4 Teachers' views on 21st-century skills

What are the skills that teacher must obtain in order to teach gifted students? What are the skills of teachers in general today? This section is examining those skills, the skills that are suitable for this technology advanced century. In order to transfer the knowledge, the teachers must possess the knowledge, skills as well as emotional capacity and range. STEM and SEL skills are highly required and one without other will result in an incomplete child development.

This section was composed of two questions:

First question rated the importance of skills presented for teaching the gifted students with the numbers from 1-10 where 1 signifies "not important" and 10 represents "very important";

Second questions focused on teachers' self-assessment of those skills with the numbers 1-10, where 1 signifies "incapable" and 10 signifies "very capable"

The presented/listed skills were:

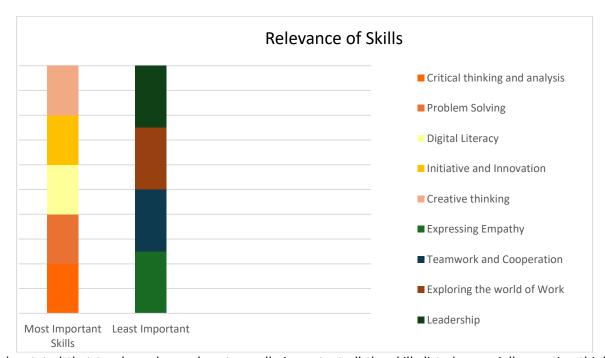
Creative thinking





- Critical thinking and analysis
- Decision making
- Digital literacy
- Expressing empathy
- Exploring the world of work
- Goals and priority setting
- Communication skills
- Initiative and innovation
- Interpersonal relationships
- Leadership
- Emotional intelligence
- Coping with stress
- Problem solving
- Self-perception and awareness
- Self-directed learning
- Time and resources management
- Teamwork and cooperation

The biggest part of teachers from Latvia, Lithuania and Bulgaria who participated in the survey, consider all the skills important and rated them with high rates – from 7 till 10.



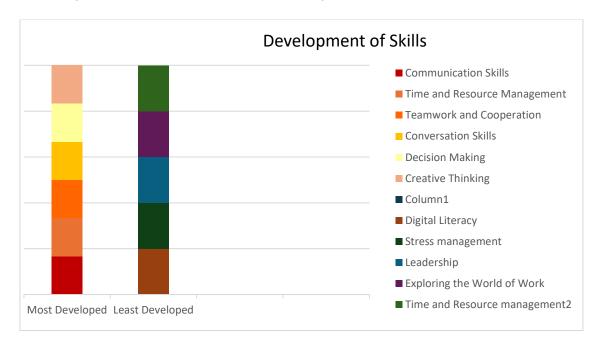
It can be stated that teachers deem almost equally important all the skills listed, especially creative thinking, critical thinking and analysis, problem solving, digital literacy and initiative and innovation





The least important skills according the opinion of participants are: Expressing empathy, Leadership, Teamwork and cooperation, Initiative and innovation, and Exploring the world of work.

When it comes to possession of the skills, the results were quite lower.



According to results the least developed skills are:

In Latvia: Digital Literacy, Expressing empathy, Exploring the world of work

In Lithuania: time and resource management, coping with stress, leadership, digital literacy, exploring the world of work

In Bulgaria: decision making, digital literacy, research, innovations, stress management and self/individual learning

The most developed skills among teachers are: communication skills, time and resources management, teamwork and cooperation, conversation skills, self directed learning, decision making and creative thinking.

Overall teachers posses all of the listed skills, but they are not equally developed and they do not correspond with the results of the importance of the skills provided by the surveyed teachers. Meaning that they are lacking in skills that they find crucial in dealing with GATE pupils.

6. Ron Vardi survey results





The following report is a result of focus groups and questioning among teachers for gifted children within the Rishon LeZion gifted education system headed by the Ron Vardi center for gifted and talented children who partners in leading this project.

The image of the gifted children teacher

The answers to the first question of the focus group:

What is the image of the gifted children teacher at the end of the first quarter of the 21st century, in terms of education, personality, character, approach, skills and abilities?, was divided into two layers:

a)Pedagogy: • Education and training in general. • Professional skills and abilities presented in class. **b)Personality**: • Emotional resilience. • Sympathy, empathy and care.

a) Qualifications in pedagogy:

• Education and training in general

The following sequence is a summary of the responses and dialogues collected over the focus group on the question which pedagogical qualification should teacher posses in area of education and training:

- 1.Education: Teachers should hold at least a bachelor's degree, preferably a master's degree.
- 2.Experience: teachers should have working experience in standard classroom before specializing in teaching gifted children
- 3. Specialization/Subject Expertise: teachers should be specialized in certain area of study (math, art, etc)
- 4. Guided practice: Training programs should include guided practice to facilitate skill development.

In summary, effective pedagogy involves a combination of qualifications, experience, specialized training, and subject expertise to create impactful learning experiences.







Professional skills and abilities presented in class

The teacher in classroom according to the focus group should have the following skills:

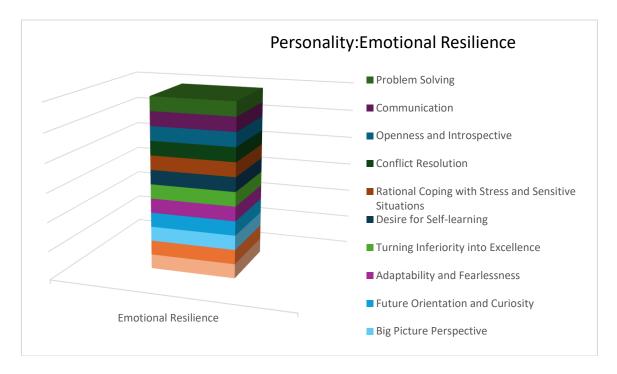
- 1. Thorough presentation: Teachers should present subjects thoroughly, clearly, and in an interesting manner.
- 2. Motivation and Exploration: Encourage pupils to seek out new and advanced learning materials and explore various learning options and sources.
- 3. Diverse Teaching Skills: Familiarity with different teaching techniques is crucial.
- 4.Individualized Learning Pace: Allow students to work at their own pace and recognize that each student's learning journey is unique.
- 5.Skills Beyond Memorization: Emphasize research, questioning, and critical thinking over rote memorization.
- 6. Flexible Curriculum Design: Assemble a curriculum that balances firm structure with flexibility.
- 7. Interactive teaching: Encourage interaction between students and the teacher, as well as among students.
- 8.Real-World context: Teach in the context of the world beyond the classroom.
- 9. Contemporary Issues and Debate: Encourage discussions on current topics based on factual information.
- 10. High Expectations and Excellence: Strive for excellence in teaching and learning.
- 11.Gifted Student Interaction: Facilitate interactions among gifted students from different grade levels and schools.
- 12.Intellectual Extracurriculars: Promote extracurricular activities with an intellectual focus.
- 13. Goal Setting and Learning from Experience: Guide pupils in setting individual goals and encourage them to strive for achievement.
- 14. Curiosity and Ambition: Cultivate curiosity and ambition in students.
- 15.Personalized Learning Tools: Provide resources and tools that allow pupils to pursue knowledge and skills at their own pace.

b) Personality:





Emotional resilience



According to the results teachers should posses following characteristics in the matter of Emotional resilience:

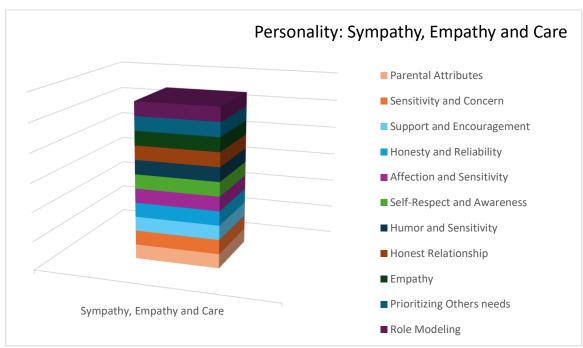
- 1.Strong and Mature Personality:
- 2. Assertiveness with Humility:
- 3. Big-Picture Perspective: The ability to see the broader context and long-term goals is crucial.
- 4. Future Orientation and Curiosity: Teachers should be forward-thinking and curious about new ideas.
- 5. Adaptability and Fearlessness: Embrace change, especially in rapidly evolving educational environments.
- 6. Turning Inferiority into Excellence: Acknowledge weaknesses and use them as stepping stones for growth.
- 7. Desire for Self-Learning and Development:
- 8. Rational Coping with Failures:
- 9. Handling Sensitive Situations:
- 10.Conflict Resolution for Learning:
- 11.Intellectual Openness and Introspection:
- 12. Effective Communication Across Diverse Groups:
- 13. Creative and Innovative Problem-Solving:

In summary, emotional resilience and a multifaceted personality contribute to effective teaching and positive student experiences.





Sympathy, empathy and care



Following is concise summary of the **essential qualities related to sympathy, empathy, and care** in a teacher's personality:

- 1. Parental Attributes: Teachers should embody some of the positive qualities seen in good parents.
- 2. Demonstrating Sensitivity and Concern: Show attentiveness and genuine concern for students' well-being.
- 3. Support and Encouragement: Understand students' needs and provide encouragement and support.
- 4. Honesty and Reliability: Be honest with oneself and others.
- 5. Affection and Sensitivity: Show affection and sensitivity toward students.
- 6.Self-Respect and Self-Awareness: Maintain self-respect and be aware of one's own emotions and reactions.
- 7.Balancing Humor and Sensitivity
- 8. Direct and Honest Relationships
- 9. Empathy and Comfort: Offer empathy, comfort, and counseling when needed.
- 10. Prioritizing Others' Needs: Distinguish between self-needs and the needs of others.
- 11. Positive Role Modeling: Use age differences to become a role model rather than being overly authoritative.
- 12. Caring for Students as Their Own Children: Treat pupils with care and understanding, while recognizing the teacher's unique role and position.

In summary, a compassionate and empathetic approach enhances the teacher-student relationship and contributes to a positive learning environment.

As the answer to the **second question** which was an add up to first question: **What should be added to current education and training of teacher to comply with the image you presented**, the answers were stating that the current education is missing: Understanding of Gifted children, better testing methods, better understanding of





cognitive processes, addressing learning difficulties, decision-making skills, effective communication:, technological Literacy, intellectual exposure, diversity and gender awareness, modern teaching techniques, counseling skills and emotional and institutional support for teachers.

7. Conclusion

This survey report analyzed teachers' knowledge, opinions, perspectives, and abilities concerning the education of gifted children. In particular, the study specifically examined their familiarity with STEAM (Science, Technology, Engineering, Arts, and Mathematics) teaching methodologies, Social and Emotional Learning (SEL), and 21st-century skills—critical components for effectively nurturing gifted students.

The survey revealed that most teachers are indeed acquainted with the concept of giftedness and many educators have direct experience in teaching gifted students, which is a positive sign.

Considering the GATE project and its subsequent activities, it's essential to recognize that the target audience isn't entirely formed of novice teachers therefore the project partners should focus on training teachers who already possess awareness of the relevant topics.

The second project outcome—a training course—should address the gaps highlighted in the questionnaire, which is regarding the teachers theoretical and practical skills. The teachers desired skills from Ron Vardi focus group discussion are in line with the results from project partners countries reports, meaning that there is a certain set of skills that is universal and applicable in teaching institutions with GATE pupils and that exact set of skills is missing.

There are two critical areas that emerge: Inclusive Education Practices and 21st-Century Skills Enhancement: Teachers are in need of enhanced skills to embrace diverse student abilities. They exhibit deficiencies, particularly in "digital skills", as well as in soft skills.

The training course should bolster these competencies, the project's success hinges on empowering experienced and less experienced teachers with targeted training, fostering inclusive classrooms, and equipping them with essential 21st-century skills.