



EMOTIONAL INTELLIGENCE THROUGH THE IMPLEMENTATION OF DIFFERENTIATED TEACHING AND LEARNING: A RESEARCH STUDY IN PRESCHOOL EDUCATION

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Abstract:

Strengthening emotional skills in children is crucial for their all-around development and social adaptation. The implementation of Differentiated Teaching and Learning, as a high-quality teaching, is a key factor in achieving the set learning goals and social skills but also the satisfaction of the psycho-emotional needs of all students. The purpose of this research study is to investigate the Emotional Intelligence of preschool children by utilizing specific strategies within the framework of Differentiated Teaching and Learning. The research study was carried out during the 2023-2024 school year. Two kindergarten classes participated in our research, where one constituted the experimental group and the other the control group, for the comparison and correlation of the findings. The research is based on the experimental approach, which includes pre-tests and post-tests. Data collection was carried out through appropriate techniques, by applying specific strategies within the framework of differentiation and by utilizing weighted research tools. Open and free techniques such as recording diaries, photographic material, observation keys and structured questionnaires were used. Both the quantitative and qualitative analysis of the research data highlighted the development of the Emotional Intelligence of preschool children through strategies within the framework of the implementation of Differentiated Teaching and Learning, while the social-emotional skills of each student were strengthened. The findings of the present research, although limited, constitute a trigger for further investigation of the issue regarding the

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strengthening of children's social-emotional skills to such an extent that they have the guarantees for a successful personal and academic development.

Keywords: emotional intelligence, differentiated teaching and learning, preschool, strategies

1. Introduction

1.1 Emotional Intelligence and Differentiated Teaching

The modern educational reality is characterized by rapid and significant changes in recent years, highlighting the need for immediate and effective adaptation to new data more urgently than ever. The element of recognizing and integrating diversity is one of the most important issues that concern educators and researchers (Brownlie, Feniak & Schnellert, 2016; Gay, 2018; Alaverdov, 2023). Differentiated Teaching and Learning is a tool that can be used to address diversity in modern classrooms. Teachers are called upon to adapt their teaching methods and adapt their entire teaching to meet the needs of all students, regardless of abilities and background (Tomlinson, 2017a). However, education should emphasize the cultivation and development of socio-emotional skills, which can enhance students' self-esteem and social interaction (Durlaketal, 2011).

The development of emotional skills in children is crucial for their all-around development and social adaptation. According to Goleman (2018), emotional skills are as important as cognitive abilities for children's success in life. The ability to recognize, perceive, and manage their own emotions, as well as to understand the emotions of others, promotes Emotional Intelligence and strengthens their relationships with peers and adults. Recent research suggests that emotional skills training can reduce aggression and anxiety while strengthening children's self-esteem (Brackett *et al.*, 2019). Through education that focuses on socio-emotional learning, children learn how to express their emotions in a healthy way, resolve conflicts, and develop empathy. In addition, the development of these skills has a positive effect on their academic performance. Research by Durlaketal (2011) shows that children who participate in activities or programs that address social-emotional learning demonstrate improved academic performance and better classroom behavior.

In recent years, the importance of Emotional Intelligence has increasingly emerged (Hargreaves, 2000, 2009; Schutz & Perkun, 2007). The growing interest of researchers in the effects of the school environment on the psychosocial development of children and adolescents has led to the development of programs that aim to prevent and promote mental health in schools. These programs focus on social and emotional learning (Karpouza, Kallianidou & Georgopoulos, 2017; Durlak *et al.*, 2019; Wanless & Domitrovich, 2015). In particular, Emotional Intelligence (Goleman, 1998), which is considered as a personal ability of the individual with specific characteristics in the expression, recognition, understanding and management of emotions within the school environment, is a continuous and dynamic process, influenced not only by the individual

himself but also by the interactions that take place in his broader social environment (Karpouza, Kallianidou & Georgopoulos, 2017; Park, 1999; Steiner, 2006). Emotional Intelligence is a factor that helps us understand the process that connects social and personal values. This term, introduced by Goleman in 1995, refers to the ability to recognize emotions in ourselves and others, to manage them, to motivate us, and to build and maintain healthy social relationships (Matthews *et al.*, 2006).

Through Differentiated Teaching and Learning, students learn to collaborate, express their feelings, and respect the differences of others. Differentiated Teaching and Learning is a philosophy and teaching approach that recognizes and responds to the diversity of students in a classroom. Its goal is to maximize learning for all students by adapting the content, process, and end product of learning to their individual needs, interests, and learning preferences (Tomlinson, 2017a). By differentiating instruction, developing social and emotional skills, and enhancing autonomy, students can achieve better educational outcomes and prepare for the challenges of the future. Educators are therefore called upon to adopt this approach in order to create a more inclusive and supportive learning environment (Sakellariou, Mitsi & Strati, 2021; Tomlinson, 2017a). Overall, investing in the development of emotional skills in children is not just an educational need but also a social imperative for building healthy and harmonious communities in the future (Sakellariou, Strati & Mitsi, 2024).

2. Methodology

2.1 Sample of the Research

Two kindergarten classes participated in this research study, one of which was the experimental group and the other the control group, for the comparison and correlation of the findings. The experimental group consisted of 17 kindergarten students, while the control group consisted of 15 kindergarten students. The research study was carried out during the 2023-2024 school year. The kindergartens that participated in the research belong to the urban area of the Epirus Region.

2.2 Methodological Approach

The present research study, which is based on an experimental design, includes pre-test and post-test, experimental groups as well as control groups (Vamvoukas, 2002). The research applied the experimental procedure with independent groups, ensuring that the experimental and control groups have similar characteristics and are comparable. Through random sampling, the selected groups are considered equivalent, which enhances the validity and reliability of the study, without requiring the prediction of the effects on the experimental variables (Cohen, Manion, & Morrison, 2008). In the experimental design, it was decided to follow the multi-methodological approach, with the use of quantitative and qualitative data (King, Keohane & Verba, 1994; Neumah, 2000; Yin, 2003). For the reliability of the research and the validity of the data, the method of "Triangulation" (Hopkins, 1993) was chosen. It was sought to obtain data with different

and varied methods (Neumah, 2000; Yin, 2003) and with a number of appropriate research tools. For data collection, both open and free techniques such as diaries, photographic material, and diary keeping will be utilized, as well as quantitative techniques such as weighted scales for recording the degree of Emotional Intelligence and observation keys. The choice of utilizing data collection methods will ensure the intersubjective control of the findings and the most complete assessment of the situation (Rentzou & Sakellariou, 2014; Cohen & Manion, 1994).

2.3 Purpose of the Research

The purpose of our research study is to highlight and evaluate the level of Emotional Intelligence of preschool children by implementing specific strategies of Differentiated Teaching and Learning. Specifically, the strategies of Flexible Grouping, Hierarchy and Grading of Activities, as well as a number of differentiation techniques in kindergarten, were utilized to investigate the effect they have on the development of children's emotional skills.

2.4 Research Questions

When investigating the issue, the central questions that will be sought to be answered are the following:

- Does the use of Hierarchy and Grading of Activities that are part of the philosophy of Differentiated Teaching and Learning promote the Emotional Intelligence of preschool children to a greater extent?
- Are differences identified in the level of Emotional Intelligence in high-ability students when implementing specific Differentiated Teaching and Learning strategies?
- Are differences identified in the level of Emotional Intelligence among low-achieving students and those with learning difficulties when implementing specific Differentiated Teaching and Learning strategies?
- Are there differences in the degree of development of Emotional Intelligence through the use of Differentiated Teaching and Learning in terms of gender in kindergarten students?
- How is Emotional Intelligence in the context of differentiation connected to personal and social development and growth in kindergarten?

2.5 Methodological Tool

A variety of research tools were used to collect data for the experimental application. Specifically, the Wang & Law Emotional Intelligence Scale (Wong & Law) was utilized. Emotional Intelligence Scale -WEILS, 2002). In addition, the Greek translation-adaptation of the Trait Emotional Intelligence questionnaire – Child Short was utilized. Form (Petrides personal website, <http://www.psychometriclab.com>) which assesses children's Emotional Intelligence as a characteristic of their personality (Mavroveli, Petrides, Shove, & Whitehead, 2008). For the needs of this research, the "Observation Key" was used again,

which was a useful tool that includes qualitative and quantitative criteria by examining the basic teaching strategies that the teacher will apply in the context of differentiation in order to examine the level of Emotional Intelligence of preschool students.

2.6 The Limitations of the Research

Our sample came from students who would be attending primary school next year. We chose them to be toddlers so that we would not have a large age gap. We also made sure that our sample included students who, as pre-toddlers, would have attended the kindergarten program and not the daycare center. Therefore, they would have had their first contact with the kindergarten curriculum.

2.7 Analysis Methods

The statistical package SPSS 25.0 for Windows was used to analyze the quantitative data. The normality of the quantitative variables was checked using the Kolmogorov - Smirnov test. Quantitative variables with a normal distribution were expressed as mean \pm standard deviation (mean \pm standard deviation). To calculate the differences before and after the intervention, the paired sample t-test with statistical significance level $p < 0.001$.

3. Presentation of Research Results

For the experimental group of the kindergarten regarding the observation key, in the intermediate measurements, a significant increase in the average values of its categories and statistically significant differences are observed. In the measurements at the beginning and at the end of the experimental intervention, statistically significant differences are presented in all dimensions of the key, with higher values being presented in the experimental classes with the intervention. In all dimensions, the significance index $p < 0.001$ indicates notable differences. Overall, the recordings per category of the key are presented in the table below:

Table 1: Comparison of mean values before and after the experimental intervention for kindergarten

Observation key		Mean Statistics	Std. Deviation Statistic
He tries to be in a good mood.	Before	3.2941	,68599
	Post	4.7647	,43724
He/She likes to collaborate with different classmates.	Before	3.3529	,70189
	Post	4.7647	,43724
Has difficulty getting used to something new/new.	Before	3.5882	,50730
	Post	1.2353	,43724
When he is happy with someone, he expresses it.	Before	3.2353	,43724
	Post	4.8235	,39295
Has good relationships with all of his/her classmates.	Before	3.3529	,49259
	Post	4.8824	,33211
Often feels angry.	Before	3.6471	,49259

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	Post	1.4706	,51450
The kids at school want to work with him/her.	Before	3.7059	,46967
	Post	4.9412	,24254
When involved in something new, he adapts easily.	Before	2.8235	,52859
	Post	4.6471	,49259
Gets angry very easily.	Before	3.7647	,56230
	Post	1.7059	,68599
Expresses his/her feelings easily.	Before	2.8235	,63593
	Post	4.8235	,39295
He/She doesn't like to wait to get what he/she wants.	Before	3.6471	,60634
	Post	1.6471	,60634
He is a happy child.	Before	3.8235	,63593
	Post	4.9412	,24254
Can't control his/her emotions.	Before	4.0000	,61237
	Post	1.2941	,46967
Gets used to new team members very quickly.	Before	3.3529	,60634
	Post	4.8235	,39295
He/She doesn't like trying new things.	Before	4.1176	,60025
	Post	1.4118	,50730
He/She likes to collaborate with other classmates.	Before	3.2941	,46967
	Post	4.8235	,39295
Knows how to show others how much I care about them.	Before	3.3529	,60634
	Post	4.8824	,33211
Often, he/she is confused about how he/she feels.	Before	4.2941	,68599
	Post	1.3529	,49259
He/She has difficulty understanding how others feel.	Before	4.4118	,71229
	Post	1.2941	,46967
If he/she doesn't do something well, he/she doesn't like to try again.	Before	3.9412	,82694
	Post	1.3706	,51450

Regarding the observation key in the kindergarten control group, we observe in the average values that some statistically significant differences are identified compared to the beginning and end of the school year, but it is clearly established that the differences are not as large as in the recordings in all dimensions of the key that were recorded respectively in the experimental kindergarten group, while there is a marginally statistically significant difference with $p < 0.005$. The recordings of the average values are presented in the table below:

Table 2: Comparison of mean values at the beginning
and end of the school year in the kindergarten control group

Observation key		Mean Statistics	Std. Deviation Statistic
He tries to be in a good mood.	Before	3.1333	,83381
	Post	4.1333	,83381
He/She likes to collaborate with different classmates.	Before	3,2000	,41404
	Post	4.3333	,48795
Has difficulty getting used to something new/new.	Before	3.7333	,88372
	Post	2.1333	,63994
When he is happy with someone, he expresses it.	Before	3.1333	,63994
	Post	4,2000	,56061
Has good relationships with all of his/her classmates.	Before	3,2000	,56061
	Post	4.1333	,51640
Often feels angry.	Before	3.6000	,82808
	Post	2,2000	,67612
The kids at school want to work with him/her.	Before	3.8000	,56061
	Post	4.6667	,48795
When involved in something new, he adapts easily.	Before	2.7333	,70373
	Post	4.0667	,45774
Gets angry very easily.	Before	3.8667	,63994
	Post	2,2000	,67612
Expresses his/her feelings easily.	Before	2.8000	,56061
	Post	3.8667	,51640
He/She doesn't like to wait to get what he/she wants.	Before	3.8667	,63994
	Post	2.4000	,50709
He is a happy child.	Before	3.7333	,45774
	Post	4.6667	,48795
Can't control his/her emotions.	Before	4.1333	,74322
	Post	2.2667	,59362
Gets used to new team members very quickly.	Before	3.1333	,51640
	Post	4.4000	,63246
He/She doesn't like trying new things.	Before	4.1333	,63994
	Post	2,2000	,77460
He/She likes to collaborate with other classmates.	Before	3,2000	,67612
	Post	4.4000	,63246
Knows how to show others how much I care about them.	Before	3.3333	,48795
	Post	4.3333	,48795
Often, he/she is confused about how he/she feels.	Before	4.3333	,61721
	Post	2,2000	,67612
He/She has difficulty understanding how others feel.	Before	4,2000	,56061
	Post	1.9100	,86189
If he/she doesn't do something well, he/she doesn't like to try again.	Before	3.8000	,67612
	Post	1.9302	,56061

From the t-test that was performed, no statistically significant differences emerged between boys and girls in any of the variables of the key. This is because the p-values that were obtained are greater than the significance level of 0.05. Although there are no

statistically significant differences, we observe that girls have slightly higher mean values in all four variables. This suggests that there may be differences, which are not strong enough to be considered statistically significant with the sample size we have. Correspondingly, from the results of the t-tests that were performed, it follows that there are not many statistically significant differences between the records in kindergarten and primary school and, therefore, the age among the students, as the p-values are greater than the significance level of 0.05.

4. Concluding Discussion

In the classes where Differentiated Teaching and Learning was implemented, the strategy of flexible grouping was utilized, according to which the way of grouping students is flexible, that is, students did not work exclusively in a group with specific classmates at any time; on the contrary, at intervals and mainly depending on the activities and preferences of the students, the composition of the group was differentiated. In the experimental classes, it was found that the degree of Emotional Intelligence of the students was enhanced to a greater extent than that of the children belonging to the control classes. The element of flexible grouping was not found in the control or experimental classes before the intervention, in fact, the researchers often encountered groups of students with a specific composition and name for a large part or even for the entire school year. It is scientifically established that when children have the opportunity to join the group of their choice, their needs are better met, and they experience success (Wickramasinghe, Aragon, & Valles, 2024; Campbell & Sears, 2024; Zuckerbrod, 2011:34).

Through the experimental application with the utilization of differentiation, the activities were based on the strategies of Hierarchy and Grading of activities, which strengthened the Emotional Intelligence of preschool children as it was found that the activities after the educational intervention seemed to arouse the interest of the students to a greater extent in the experimental classes compared to the control classes. The way of shaping the teaching and the activities selected by the teachers, who knew very well the needs, preferences and the level of readiness of their students (Martin & Pickett, 2013; Tomlinson, 2014), aroused positive emotions in the students, attracted their curiosity and kept their interest undiminished throughout the lesson (Tobin & Tippett, 2013; Tomlinson, 2014). Lesson planning based on Differentiated Teaching and Learning provides the opportunity for students to freely express themselves, highlight their interests, and shape their values, creating the conditions for the production of intrinsic motivation. As research shows, there is a strong positive correlation between motivation and academic performance of students of all age groups in those cases where teachers promoted the free and creative expression of students without hindrance (McCombs, 2003; Schunk, & Zimmerman, 2019; Niemann & Möller, 2020; López & Fernández, 2021). According to research data, the use of Differentiated Teaching and Learning enhanced the Emotional Intelligence of High Learning Abilities students. Charismatic students, through the use of Differentiated Teaching and Learning, were found to develop high

levels of emotional intelligence, an element that is consistent with Gross's theory (2002), according to which gifted students exhibit particular sociability and enjoy greater popularity at school, and are therefore expected to demonstrate greater emotional stability. Furthermore, research has found that gifted students develop empathy and social and emotional skills to a greater extent (Feldman, 1984; Freeman, 1983; 1979; Janos, 1983; Garland & Zigler, 1999; Neihart *et al.*, 2002; Bastea & Gioka, 2020).

For children with low academic performance and learning difficulties, this research found that the implementation of Differentiated Teaching and Learning enhanced their emotional development. It is a fact that differentiation is a valuable aid to inclusive education as it strengthens self-confidence (Kamarudina *et al.*, 2017), improves the feeling of self-esteem (Vassilikie *et al.*, 2019), increases active participation (Dinaki, 2019), enriches learning experiences (Chien, 2015; Santangelo & Tomlinson, 2012) and strengthens positive emotions while eliminating feelings of failure that children with typical and non-typical development experienced in the context of traditional teaching (Tomlinson & Strickland, 2018).

This study investigated the relationship between students' gender and the level of emotional intelligence development during the implementation of Differentiated Teaching and Learning in experimental Kindergarten classes, where it was found that there were no differences. The relationship between gender and emotional intelligence has concerned the scientific community in recent years, with various studies that have examined the coherence of these two variables, while it remains a research topic that requires further examination and investigation. Emotional Intelligence has been linked to gender in many studies and research. However, there are studies that show that there is no such differentiation between the genders or that the difference between them is very small (Karantza, 2011). It is important, however, to take into account that Emotional Intelligence is a complex process and is influenced by many factors, not just gender. The role of family, school and the environment in general is also important in the development of emotional intelligence in children. Also, encouraging children to express their emotions, training them in dealing with stress and developing their social skills are key factors in increasing emotional intelligence in children, regardless of gender (Smith, 2019). On the other hand, many studies have shown that there are differences between the two genders in the perception and objective evaluation of emotions (Platsidou, 2006; Williams *et al.*, 2010; Esturgo *et al.*, 2010). Most of these studies show that girls have higher Emotional Intelligence than boys (Mayer *et al.*, 2016; Nicolau & Raluca, 2021. Schutte & Malouff, 2019. Parker *et al.*, 2020).

The promotion and development of the Emotional Intelligence of preschool children by utilizing a wide range of basic, appropriate, alternative, modern and innovative teaching strategies within the framework of implementing Differentiated Teaching and Learning is considered imperative not only to enhance the well-being of children, but also because it appears to have long-term positive effects on all aspects of their adult lives.

Conflict of Interest Statement

The authors declare no conflicts of interest.

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References

Alaverdov, E. (2023). Diversity, Equity, and Inclusion in a Global Perspective. *The Journal of Education, Culture, and Society*, 14 (2), 49-56. <http://dx.doi.org/10.15503/jecs2023.2.49.56>

Bastea A., & Gioka M. (2020). Emotional Development and High Intelligence. *Panhellenic Conference of Educational Sciences*, 9, 482–495. <https://doi.org/10.12681/edusc.3190>

Brackett, M. A., Reyes, M. R., & Rivers, S. E. (2019). Enhancing academic performance and social-emotional learning through a social-emotional learning intervention. *Journal of Educational Psychology* (22). <https://www.sciencedirect.com/science/article/abs/pii/S1041608010001214>

- Brackett, M. A., & Rivers, S. E. (2019). *Emotional Intelligence: Theory, Findings, and Implications*. In *Handbook of Emotion Regulation* (2nd ed., pp. 221-237). New York: Guilford Press. Retrieved from <https://www.iccpp.org/wp-content/uploads/2020/07/Handbook-of-emotion-regulation.pdf>
- Brownlie, F., Feniak, C., & Schnellert, L. (2016). *Student diversity: Teaching strategies to meet the learning needs of all students in K-10 classrooms*. Pembroke Publishers Limited. Retrieved from <https://www.pembrokepublishers.com/book.cgi?isbn=9781551383187>
- Campbell, T., & Sears, H. (2024). Analyzing elementary students' access to cognitive-oriented positions in mathematics. *International Electronic Journal of Mathematics Education*, 19(1), <https://doi.org/10.29333/iejme/14191>
- Chien, C. (2015). Analysis of Taiwanese elementary school English teachers' perceptions of, designs of, and knowledge constructed about differentiated instruction in content, *Cogent Education* 2: <https://doi.org/10.1080/2331186X.2015.1111040>
- Cohen, L., Manion, L., & Morrison, K. (2008). *The Methodology of Educational Research*. Athens: Metaichmio.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2019). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>
- Feldman, D. H. (1984). A follow-up of subjects scoring above 180 IQ in Terman's "Genetic Studies of Genius". In Garland, Ann. F, Zigler, Edward (1999). Emotional and behavioral problems among highly intellectually gifted youth, *Roeper Review*, Vol. 22, Issue 1, p41-44, Sep 99. <https://doi.org/10.1080/02783199909553996>
- Freeman, J. (1979). *Gifted children*. Baltimore: University Park Press. Retrieved from https://books.google.ro/books/about/Gifted_Children.html?id=-6z06wVu5UC&redir_esc=y
- Freeman, J. (1983). Emotional problems of the gifted child. *Journal of child psychology and psychiatry*, 24(3), 481-485. <https://doi.org/10.1111/j.1469-7610.1983.tb00123.x>
- Hopkins, D. (1993). *A teacher's guide to classroom research* (2nd ed.) Buckingham-Philadelphia: Open University Press. Retrieved from <https://saochhengpheng.wordpress.com/wp-content/uploads/2017/03/practical-guide-to-classroom-research.pdf>
- Garland, A. F., & Zigler, E. (1999). Emotional and behavioral problems among highly intellectual gifted youth. *Roeper Review*, 22, 41-44. <https://doi.org/10.1080/02783199909553996>
- Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice*. Teachers' College Press. Retrieved from <https://eric.ed.gov/?id=ED581130>
- Goleman, D. (2018). What makes a leader? In *Military leadership* (pp. 39-52). Routledge. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/10187249/>
- Goleman, D. (1998). *Working with emotional intelligence*. NY: Bantam Books. Retrieved from

- https://books.google.ro/books/about/Working_with_Emotional_Intelligence.html?id=ZNbsngEACAAJ&redir_esc=y
- Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and teacher education*, 16 (8), 811-826. Retrieved from [https://doi.org/10.1016/S0742-051X\(00\)00028-7](https://doi.org/10.1016/S0742-051X(00)00028-7)
- Hargreaves, A. (2009). A decade of educational change and a defining moment of opportunity—an introduction. *Journal of educational change*, 10, 89-100. <https://doi.org/10.1007/s10833-009-9103-4>
- Janos, P. (1983). The psychosocial adjustment of children of very superior intellectual ability. In Garland, Ann. F, Zigler, Edward (1999). Emotional and behavioral problems among highly intellectually gifted youth, *Roeper Review*, Vol. 22, Issue 1, p. 41-44, Sep 99. <https://psycnet.apa.org/doi/10.1080/02783199909553996>
- Kamarudina, M. F. bin, Kamarulzamanb, M. H. bin, Bin, M. S. A., Sharifb, M., & Esrati, M. M. S. N. S. M. Z. (2017). The Impact of Differentiated Instruction on the Motivation and Achievements of Gifted Students in Mathematics. *The 3rd International Conference on Education in Muslim Society (ICEMS)*. Retrieved from https://www.researchgate.net/publication/327816318_The_Impact_of_Differentiated_Instructions_on_the_Motivation_and_Achievements_of_Gifted_Students_in_Mathematics
- Karpouza, E., Kallianidou, R., & Georgopoulos, A. (2017). The contribution of experiential education to the emotional development of elementary school pupils: A qualitative approach / Using experiential education for promoting elementary school pupils' emotional development: A qualitative approach. *Education Sciences*, (2), 42-63.
- King, G., Keohane, R. O., & Verba, S. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton, NJ: Princeton University Press. Retrieved from <https://www.jstor.org/stable/j.ctt7sfxj>
- López, M. J., & Fernández, C. (2021). The influence of creative teaching on students' motivation and academic performance. *Journal of Educational Psychology*, 113(5), 866-878.
- Rentzou, K. & Sakellariou, M. (2014). *Space as a pedagogical field in preschool learning environments. Design and Organization*. Athens: Field
- Martin, M. R., & Pickett, M. T. (2013). The Effects of Differentiated Instruction on Motivation and Engagement in Fifth-Grade Gifted Math and Music Students. *Online submission*. Retrieved from <https://eric.ed.gov/?id=ED541341>
- Matthews, G., Emo, A. K., Funke, G., Zeidner, M., Roberts, R. D., Costa Jr, P. T., & Schulze, R. (2006). Emotional intelligence, personality, and task-induced stress. *Journal of Experimental Psychology: Applied*, 12 (2), 96. <http://dx.doi.org/10.1037/1076-898X.12.2.96>
- Mavroveli, S., Petrides, KV, Shove, C., & Whitehead, A. (2008). Investigation of the construct of trait emotional intelligence in children. *European Child & Adolescent Psychiatry*, 17(8), 516-526. <https://doi.org/10.1007/s00787-008-0696-6>

- Mayer, J. D., Salovey, P., & Caruso, D. R. (2016). Emotional Intelligence: Theory, findings, and implications. *Psychological Inquiry*, 11(3), 185-211. Retrieved from <https://aec6905spring2013.wordpress.com/wp-content/uploads/2013/01/mayersaloveycaruso-2004.pdf>
- McCombs, B. L. (2003). A framework for the redesign of K-12 education in the context of current educational reform. *Theory into Practice*, 42 (2), 93-101. Retrieved from <https://www.jstor.org/stable/1477349>
- Neumann, W. L. (2000). *Social research methods, qualitative and quantitative approaches* (4th ed.). Boston: Allyn and Bacon. Retrieved from <https://letrunghieutvu.yolasite.com/resources/w-lawrence-neuman-social-research-methods-qualitative-and-quantitative-approaches-pearson-education-limited-2013.pdf>
- Nicolau, M., & Raluca, S. (2021). Gender Differences in Emotional Intelligence: A Study among Adolescents. *Journal of Youth and Adolescence*, 50(5), 878-889.
- Niemann, M., & Möller, J. (2020). The Role of Creativity in Student Engagement and Achievement. *Creativity Research Journal*, 32(3), 237-246.
- Neihart, M., Reis, S., Robinson, N., & Moon, S. (Eds.) (2002). *The social and emotional development of gifted children: What do we know?* Waco, TX: Prufrock Press. Retrieved from <https://www.routledge.com/The-Social-and-Emotional-Development-of-Gifted-Children-What-Do-We-Know/Neihart-Neihart-Reis-Robinson-Moon/p/book/9781618214843?srsId=AfmBOorIqVS-meg5KdDE6cqWt4sxq1w7417IQ31COtWZnlbNr-AYjCmT>
- Park, J. (1999). Emotional literacy: Education for meaning. *International Journal of Children's Spirituality*, 4(1): 19-28. <https://doi.org/10.1080/1364436990040103>
- Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2020). Emotional intelligence and academic achievement: A meta-analysis. *Educational Psychology Review*, 32(1), 1-29. [http://dx.doi.org/10.1016/S0191-8869\(03\)00076-X](http://dx.doi.org/10.1016/S0191-8869(03)00076-X)
- Sakellariou, M., Mitsi, P. & Strati, P. (2021). *Differentiated Teaching and Learning in Greek Preschool and School Education Teachers' Views*. Lambert Academic Publishing. Retrieved from https://www.researchgate.net/publication/349075783_Differentiated_Teaching_and_Learning-Greek_preschool_and_primary_school_teachers'_views
- Sakellariou, M., Strati, P., & Mitsi, P. (2024). The dynamics of Differentiated Teaching and Learning in enhancing the emotional well-being of preschool and school-age children: A research program of democratic education. In the 1st International Scientific Conference of Arta entitled "Innovation, Education & Lifelong Learning in the 21st Century", Regional Unit (RU) of Arta, the Directorate of Primary Education (DIPE) of Arta and the Municipality of Arta, Arta, 31-45, Volume, D, ISBN 978-960-612-547-8
- Santangelo, T., & Tomlinson, C. A. (2009). The application of differentiated instruction in post-secondary environments: Benefits, challenges, and future directions. *International Journal of Teaching and Learning in Higher Education*, 20(3), 307- 323.

- Retrieved from Q
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.500.3475&rep=rep1&type=pdf>.
- Santangelo, T., & Tomlinson, C. A. (2012). Teacher Educators' Perceptions and Use of Differentiated Instruction Practices: An Exploratory Investigation. *Action in Teacher Education*, 34 (4), 309-327. <https://doi.org/10.1080/01626620.2012.717032>
- Schutz, P. A., & Pekrun, R. (2007). Introduction to Emotion in Education. In PA Schutz, & R. Pekrun (Eds.), *Emotion in Education: A Volume in Educational Psychology* (pp. 3-10). Cambridge, MA: Academic Press, Elsevier Inc. Retrieved from <https://www.sciencedirect.com/book/9780123725455/emotion-in-education>
- Schunk, D. H., & Zimmerman, B. J. (2019). *Motivation and Self-Regulated Learning: Theory, Research, and Applications*. Routledge. Retrieved from <https://psycnet.apa.org/record/2008-03967-000>
- Schutte, N. S., & Malouff, J. M. (2019). The relationship between emotional intelligence and academic performance: A meta-analysis. *Personality and Individual Differences*, 143, 185-191.
- Schutz, P. A., & Pekrun, R. (2007). Introduction to Emotion in Education. In PA Schutz, & R. Pekrun (Eds.), *Emotion in Education: A Volume in Educational Psychology* (pp. 3-10). Cambridge, MA: Academic Press, Elsevier Inc. Retrieved from <https://www.sciencedirect.com/book/9780123725455/emotion-in-education>
- Smith, R. (2019). *Effective Communication in the Classroom*. Pearson.
- Steiner, K. (2006). *Emotional Intelligence with Heart*. Athens: Kastanioti. Retrieved from https://books.google.ro/books/about/Emotional_Literacy.html?id=WglQfhXCc54C&redir_esc=y
- Tobin, R. & Tippett, C., D. (2013). Possibilities and Potential Barriers: Learning to Plan for Differentiated Instruction in Elementary Science. *International Journal of Science and Mathematics Education*, 12(2), 423-443. <https://doi.org/10.1007/s10763-013-9414-z>
- Tomlinson, C. A. (2017). *How to differentiate instruction in academically diverse classrooms*. ASCD. 71. Retrieved from <https://www.ascd.org/books/how-to-differentiate-instruction-in-academically-diverse-classrooms-3rd-edition?variant=117032>
- Tomlinson, C. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). ASCD. Retrieved from <https://rutamaestra.santillana.com.co/wp-content/uploads/2020/01/The-Differentiated-Classroom-Responding-to-the-Needs.pdf>
- Tomlinson, C. A., & Strickland, C. (2018). *Leading and Managing a Differentiated Classroom*. ASCD. Retrieved from <https://files.ascd.org/pdfs/publications/books/Leading-and-Managing-A-Differentiated-Classroom-2ed-sample-pages.pdf>
- Vamvoukas, M. (2002). *Introduction to psychopedagogical research and methodology*. Athens: Grigoris.
- Vassiliki, G., Marita, P., & Eleni, A. (2011). The Efficacy of Teaching Differentiation on Children with Special Educational Needs (SEN) Through Literature. *Procedia - Social and Behavioral Sciences*, 29, 67-74. <https://doi.org/10.1016/j.sbspro.2011.11.207>

- Wanless, S. & C. Domitrovich (2015). Readiness to implement school-based social emotional learning interventions: Using research on factors related to implementation to maximize quality. *Prevention Science*, 16 (8): 1037-1043. <http://dx.doi.org/10.1007/s11121-015-0612-5>
- Wickramasinghe, I., Aragon, R., & Valles, JR (2024). Influential factors on elementary students' academic performance and identifying the appropriate performance group. *Discover Education*, 3(1), 76. <https://doi.org/10.1007/s44217-024-00167-x>
- Yin, R. K. (2003). *Case Study Research-Design and Methods: Applied Social Research Methods* (3rd ed.), Thousand Oaks, California, Sage Publications. Retrieved from https://books.google.ro/books/about/Case_Study_Research.html?id=k0WrN3rBz_sC&redir_esc=y
- Zuckerbrod, N. (2011). From Readers Theater to Math Dances: Bright Ideas to Make Differentiation Happen. *Instructor*, 120(5), 31-35. <https://files.eric.ed.gov/fulltext/EJ945709.pdf>

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