

Teachers' perceptions of the effectiveness of teaching techniques in developing students' thinking and expression skills in Albania

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Abstract

This study aims to explore how teaching techniques can enhance students' thinking and expression skills from teachers' perspectives. A correlational research design was used, with 412 primary school teachers participating. Based on the chi-square test results, the findings indicate a linear relationship between the study variables. The t-test results indicate higher averages compared to the population value. The teachers' perceptions of several teaching techniques such as INSERT, SQ3R, roundtable, role play, think/pair/share, and brainstorming suggest that these methods can potentially develop students' thinking and expression skills. Overall, this research provides a promising approach to improving students' thinking and expression skills through teaching techniques in the classroom.

Keywords: teaching, techniques, thinking, perception, expression, skills

Introduction

Acquiring thinking and communication skills heavily relies on practice and exposure to stimulating environments in various settings such as family, school, and society. It is commonly believed that individuals who read and watch movies tend to possess a more comprehensive vocabulary and knowledge, indicating that they are more proficient in thinking and expressing themselves. This notion is supported by research conducted by Ekahitanond (2011) suggests that watching movies can enhance thinking skills, and Dickinson et al. (2012) found that continuous reading can develop expressive skills. Teaching techniques encompass a broad range of approaches utilized in the learning process to enhance students' skills.

Understanding and navigating the world heavily relies on our thinking skills. These skills encompass a range of abilities, such as problem-solving, reasoning, action planning, idea generation, and more. The development of thinking skills is based on the cognitivism theory, which recognizes learners as active creators of their knowledge. This means that learning is a research process to derive meaning from interactions with the environment (Musai, 2014). Thinking skills comprise various aspects such as memory, concept formation, planning, reasoning, imagination, problem-solving, decision-making, justification, and description of thoughts in words, among others (Cremin & Arthur, 2014). Metivier (2022) distinguishes thinking types from thinking methods. Thus, different thinking methods stimulate various thinking types. Writing, discussion,

debate, mind mapping, and other techniques can improve thinking skills. These methods should be planned with specific topics to develop or enhance thinking skills. Concrete thinking is the most basic form of thinking, which relies on our perception to create thoughts based on the information we absorb through our senses (Kalive, n.d.). Abstract thinking, on the other hand, refers to the ability to generate thoughts that are not based on sensory input. An example of abstract thinking is storytelling (Kalive, n.d.).

Reflective thinking is a valuable tool for solving complex problems, as it involves reflecting on past experiences to gain insight (Kalive, n.d.). This thinking intensely focuses on a particular subject, responding to stimuli (Butterworth & Thwaites, 2013; Kaya, 2022). On the other hand, critical thinking involves analyzing, evaluating, and arguing based on the content at hand (Butterworth & Thwaites, 2013). It includes a range of other abilities, such as observation, reasoning, decision-making, and judgment (Polat, 2020; Tapung et al., 2018), distinguishing, comparing, and categorizing (Cottrel, 2005; Hanesova, 2014; Kaya, 2022).

Divergent thinking emphasizes creativity and generating many ideas, while convergent thinking focuses on producing high-quality ideas (Thinking Differently, 2007). Enhancing thinking skills corresponds to improving expressive abilities, which can be facilitated through various techniques such as dramatization and role-playing (Zwiers, 2005).

Explanation, description, and argumentation are critical thinking skills for articulating reasoning and justifying one's position (Butterworth & Thwaites, 2013; Cottrell, 2005). Developing expression skills is essential for effective communication, reading, and writing, facilitated by vocabulary development (Zwiers, 2005).

Communication is critical for constructivist learning, which emphasizes social interaction and dialogue during the learning process (Zwiers, 2005). Communication involves exchanging information, opinions, and facts through verbal or written means between a speaker and a listener. In education, verbal and written communication are two essential skills students should acquire. Different teaching techniques, such as conversation, reflection, explanation, description, and argumentation, develop various types of thinking, including critical, creative, and analytical thinking. These techniques enhance expression skills and develop thinking skills simultaneously. Several methods, such as dramatization, graphic organizers, and argumentative essays, can help students enhance their thinking and expression skills. Writing is a valuable form of communication, especially for expressing difficult verbalizing emotions. Students can develop their writing skills through critical thinking techniques by reflecting on what they learned and writing essays.

The roundtable technique is a helpful approach to developing thinking and communication skills. It requires students to be divided into groups, each adding to the previous answer on their paper in a clockwise direction. This technique promotes critical thinking and communication skills simultaneously.

Another effective teaching technique for developing thinking and communication skills is INSERT. It helps readers consciously interact with the text to clarify their

thinking. Brainstorming is a popular idea-generation technique that fosters thinking and communication skills by encouraging students to share and evaluate their ideas.

Group discussions are also a practical approach to developing thinking and communication skills. Group discussions enable students to express their thoughts clearly, argue their opinions, and tolerate other viewpoints. It also helps students evaluate ideas and synthesize personal views while assuming a leading role in the group. Discussions can be a valuable tool for students struggling to understand complex concepts, as they allow for group deliberation, challenging ideas, and evaluation of possible explanations. In these discussions, teachers ask questions and probe for more information, while students also ask questions and react to each other's responses. Small group discussions and presentations can also help develop communication skills, though some students may experience anxiety or fear.

Historically, discourse and reflection techniques have been used by philosophers like Socrates and Plato to develop thinking skills. Graphic organizers such as "T, X, and Y Charts" can help students recognize, understand, and compare ideas, while "I feel, I think, I can" is a technique that can help students express themselves more effectively.

Interpretation is another critical skill that students need to develop, both in understanding the implicit meaning of a text and in decoding figurative language like metaphors, analogies, symbols, and multiple-meaning words. Using images can be an effective way to develop these skills, as pictures contain a wealth of information that students can interpret and describe.

The literature review highlights several actions of teaching techniques that can enhance students' thinking and expressive skills, including encouraging them to describe, communicate, read, discuss, explain, reflect, give opinions and ideas, and argue in writing. These actions have also been empirically researched from the perspectives of teachers. Numerous studies have emphasized the role of teaching techniques in collecting, organizing, arranging, and structuring ideas. Brainstorming is one of the techniques that enable students to express their thoughts on a particular topic. The story map technique enables students to describe a story they have read or heard through illustration (Teaching and Learning Strategies, 2013). Another technique is the mind map, a graphic organizer of ideas, thoughts, connections, ordering, and summarizing writing in general (Buzan & Abbott, 2012). Overall, this research explores the possibilities of using teaching techniques to develop students' thinking and expression skills from the teachers' perspective.

Research Questions

1. How do teaching techniques used in the learning process affect the development of students' thinking and expression skills?
2. what is the potential number of opportunities provided by the INSERT, SQ3R, roundtable, role play, think/pair/share, and brainstorm techniques for fostering students' thinking and expressive abilities?

Research Hypothesis

1. Teaching techniques do not have any influence on the development of students' thinking and expression skills.

Methodology

The correlational research design is used in this study to explain the relationships between study variables. Correlational studies observe variables that fluctuate in the same direction, meaning that when one increases or decreases, the other does as well, indicating a positive relationship. When high scores of one variable is associated with high scores of the other, this is referred to as a positive linear relationship. The strength of the relationship in this study is indicated by the correlation coefficient, which ranges from -1.00 to +1.00. A coefficient value of 0.00 indicates no linear relationship. In correlational studies, variables are identified and examined but not manipulated. The study was conducted in several Kosovo cities, including Prishtina, Mitrovica, Gjilani, and Ferizaj. The city selection was determined using the lottery method, and only schools in these four cities were included to achieve the desired sample size of 30 schools. The sample size in this study was determined based on a 95% confidence level and a 5% error probability. According to education statistics in Kosovo (2022/2023, 2023), there are 17,211 teachers. According to Cohen et al. (2000), to ensure an adequate sample size of 5% of the population, the sample should be at least 370 teachers (Cohen et al., 2000). Given an average of 20 teachers per school in an urban school with four parallels and five-grade levels, including at least 30 schools was necessary to account for potential errors that may occur during the study. Of the 430 questionnaires distributed in schools, 412 were collected, even though some errors may have occurred. As a result, the research sample consists of 412 primary school teachers from the first to fifth grades. The study utilized a random sampling method, where each member of the population under study had an equal opportunity of being chosen. This sampling technique ensured that selecting one member did not affect the probability of another member being chosen, as Cohen et al. (2018) explain in their research.

The questionnaire instrument comprises demographic inquiries relating to the respondent's residence and field of study. It employs a 5-point Likert scale in collecting data, with response options ranging from "strongly disagree" to "strongly agree". The questionnaire is divided into six distinct sections. This report explicitly summarises the segment devoted to teaching methodologies that foster the development of student's ability to think critically and communicate effectively. The instrument's reliability and validity were measured using Cronbach's alpha. Based on the alpha Cronbach model, the questionnaire demonstrates reasonable reliability for problem research, with a coefficient value of .871 across 11 items. Additionally, the questionnaire's validity was evaluated using Cronbach's alpha coefficient, resulting in a value of $\alpha = .778$ and $p = .000$. The data collection process spanned eight weeks, with questionnaire distribution in the first four weeks and collection in the remaining four weeks. Before distribution, the school director and teachers were briefed on the study's objectives and the anonymity of the questionnaire. With their approval, the questionnaires were made available at the schools, where teachers could complete them at leisure. It was clear that participation in the questionnaire was entirely voluntary and that teachers were

within their rights to decline participation. The teachers were given the necessary information in their respective schools' teachers' rooms and the questionnaire to complete during their free time. This approach allowed the participating teachers to express their ideas freely without pressure. After collecting the questionnaires, the data were coded and analyzed using the Version 20 Statistical Package for Social Science (SPSS, Version 20). The demographic data were described using descriptive statistics, frequency, and percentage. In contrast, the variables that show the actions of the teaching techniques were described using mean, standard deviation, and t-test. Standard deviation measures how much data is spread around the mean, representing the data's centre point (Cohen et al., 2018). The hypothesis regarding the linear relationship between the variables was tested using the Chi-Square test, with a value of $p < 0.05$ verifying the linear relationship between the variables. To examine the actions of the teaching techniques individually, the one-sample t-test was used to determine whether the average was greater, smaller, or equal to the actual population average (Agresti, 2007).

Result

The findings of the descriptive analysis, such as frequencies, averages, standard deviation, and hypothesis testing were presented in this heading.

Table 1: frequency and percentage of Teachers by Cities

City	Frequency	Percent
Tirana	174	42.2
Berat	95	23.1
Durres	75	18.2
Vlore	68	16.5
Total	412	100.0

According to Table 1, 42.2% of the teachers in the study are from Tirana schools, 23.1% are from Berat schools, 18.2% are from Durres schools, and 16.5% are from Vlore schools.

Table 2: frequency and percentage of Teachers by Study Programs

Program of studies	Frequency	Percent
Preschool	12	2.9
Pedagogy	41	10.0
Elementary	293	71.1
Other	56	13.6
Total	402	97.6

According to Table 2, only 2.9% of teachers have completed the preschool program, while 10% still need to complete the pedagogy program. The majority, comprising 71.1% of the participants, have received sufficient training for the elementary program. Interestingly, 13.6% of teachers who practice teaching from first to fifth grade graduated from other programs such as Albanian language and literature, history, and music.

Table 3: T-Test and Descriptive Statistics of Teaching Technique Actions

Items	Mean	SD	T-test
Teaching Technique			

develop students' thinking and expression skills	1.56	.693	16.237
encourage students to communicate, discuss	1.30	.518	11.634
encourage students to explain, and interpret	1.35	.567	12.619
encourage students to give ideas, thoughts	1.33	.594	11.079
encourage students to reflect	1.43	.616	14.104
encourage students to argue	1.53	.661	16.056
encourage students to write	1.54	.649	16.894
encourage students to describe, demonstrate	1.46	.645	14.290
encourage students to read comprehensibly	1.47	.623	15.305

Table 3 shows that there is no considerable difference between average and standard deviation among articles that demonstrate teaching techniques during students' learning processes, regardless of the subject. The t-test scores are higher than the population's average, and therefore, the null hypothesis (H₀) is rejected while the alternative hypothesis (H_A) is accepted. The scores for each article are as follows:

Developing students' thinking and expression skills": M = 1.56, SD = 0.693, t = 16.237. Encouraging students to communicate with each other, talk and discuss educational issues in the classroom": M = 1.30, SD = 0.518, t = 11.634. Encouraging students to explain, interpret, educational topics": M = 1.35, SD = 0.567, t = 12.619. Encouraging students to give opinions/ideas in educational matters": M = 1.33, SD = 0.594, t = 11.079. Encouraging students to reflect on educational issues": M = 1.43, SD = 0.616, t = 14.104. Encouraging students to argue": M = 1.53, SD = 0.661, t = 16.056. Encouraging students to write essays or free writing": M = 1.54, SD = 0.649, t = 16.894. Encouraging students to describe and demonstrate": M = 1.46, SD = 0.645, t = 14.290. Encouraging students for reading comprehension": M = 1.47, SD = 0.623, t = 15.305.

Table 4: Relationship of Developing Students' Thinking and Expression Skills with Others' Actions of Teaching Techniques

Item	χ^2	p- value	r- value
TT encourage students to communicate, discuss	9,014	.000	.150
TT encourage students to explain, interpret	16,516	.000	.203
TT encourage students to give ideas, thoughts	30,375	.000	.276
TT encourage students to reflect	37,748	.000	.308
TT encourage students to argue	112,949	.000	.533
TT encourage students to write	84,325	.000	.461
TT encourage students to describe, demonstrate	75.927	.000	.437
TT encourage students to read comprehensibly	101,191	.000	.506

Table 4 demonstrates a positive linear correlation between teaching techniques that promote the development of students' thinking and expressive skills and other teaching techniques. This confirms the alternative hypothesis. The first article, "Encouraging students to communicate

with each other, talk, and discuss educational issues in class," yielded a significant value of $\chi^2 = 9.014$ with $p = .000$ and $r = .150$. The second article, "Encouraging students to explain and interpret educational topics," produced scores of $\chi^2 = 16.516$, $p = .000$, and $r = .203$. The third article, "Encouraging students to share opinions and ideas on educational matters," had values of $\chi^2 = 30.375$, $p = .000$, and $r = .276$. The fourth article, "Encouraging students to reflect on educational matters," generated scores of $\chi^2 = 37.748$, $p = .000$, and $r = .308$. The fifth article, "Encouraging students to engage in arguments," showed scores of $\chi^2 = 112.949$, $p = .000$, and $r = .533$. The sixth article, "Encouraging students to write essays or engage in free writing," had scores of $\chi^2 = 84.325$, $p = .000$, and $r = .461$. The seventh article, "Encouraging students to describe and demonstrate," produced scores of $\chi^2 = 75.927$, $p = .000$, and $r = .437$. Lastly, the eighth article, "Encouraging students to read and comprehend," had scores of $\chi^2 = 101.191$, $p = .000$, and $r = .506$.

Table 5: Perceptions of Teachers' Experiences of Some Teaching Techniques that Develop Thinking and Expression Skills at the Same Time During the Learning Process

Technique	Yes	No	Missing
Roundtable	244	-	168
INSERT	260	-	152
SQ3R	215	-	197
Brainstorming	257	-	155
Think/pair /share	271	-	141
Role play	279	-	133

Table 5 shows that 244 out of 412 participants reported that the roundtable technique helps improve students' thinking and expression skills. There were 168 missing responses for this technique. For the INSERT technique, 260 participants gave positive feedback, while 152 responses were missing. As for the SQ3R technique, 215 participants gave positive feedback, and there were 197 missing responses. For the Brainstorming technique, 257 participants gave positive feedback, while 155 responses were missing. For the think/pair/share technique, 271 participants gave positive feedback, and there were 141 missing responses. Lastly, for the role-play technique, 279 participants gave positive feedback, while 133 responses were missing.

Discussion

The results of the study indicate that teaching techniques have the potential to enhance students' thinking and expression skills. The study confirms the effectiveness of various teaching techniques, such as encouraging communication, discussion, and debate among students, prompting students to interpret and explain events, soliciting their ideas and opinions on educational issues, encouraging reflection, argumentation, essay writing, free writing, drawing, and reading comprehension. The study's hypothesis (H0) was not supported, while the alternative hypothesis (HA) was confirmed, establishing a linear relationship between the variables. The finding is in line with similar findings. Goodman (1990) suggested that the use of brainstorming, diagrams, and story maps during the learning process can improve students' thinking and expression skills. Abdikarimova et al. (2021) found that questioning, conversation,

communication, reflection, and presentation can enhance students' expression skills. The application of teaching techniques such as roundtable, INSERT, SQ3R, brainstorming, think/pair/share, and dramatization, as reported by teachers, can help develop students' thinking and self-expression skills. Marbun and Ernidawati (2015) found that the INSERT technique can improve students' reading comprehension, indicating the interdependence of these skills. Parmawati et al. (2020) reported that the roundtable technique led to continuous improvement in students' expression skills. Ernawati (2014) demonstrated that using brainstorming during the learning process can impact students' achievement in writing narrative paragraphs. Sieck (2021) showed that the SQ3R technique could aid in the understanding of read information. Sapsuha and Bugis (2013) demonstrated that the think/pair/share technique could improve students' comprehension of written text. While this study provides a broad understanding of the potential actions of teaching techniques for developing students' thinking and expression skills, further research is necessary to identify these actions in more detail.

Conclusion

The study findings concluded that teaching techniques have a unique potential to enhance students' thinking and self-expression skills. The research also confirmed that the INSERT, SQ3R, roundtable, role play, think/pair/share, and brainstorming techniques effectively foster the development of students' thinking and self-expression abilities within the educational setting.

References

- Abdikarimova, M., Tashieva, N., Tashbolot kyzy, A., & Abdullaeva, Z. (2021). Developing students verbal communication skills and speech etiquette in English language teaching. *Open Journal of Modern Linguistics*, 11(1), pp.83–89.
- Agresti, A. (2007). *An Introduction to categorical data analysis*. John Wiley & Sons, Inc.
- Anand, D., & Hsu, L. (2020). Think outside the book: Transformative justice using children's literature in educational settings. *Journal of Curriculum Studies Research*, 2(2), 122-143. <https://doi.org/10.46303/jcsr.2020.13>
- APA Dictionary of Psychology. (2022, May 1). <https://dictionary.apa.org/thinking>
- Brownell, C., & Rashid, A. (2020). Building Bridges Instead of Walls: Engaging Young Children in Critical Literacy Read Alouds. *Journal of Curriculum Studies Research*, 2(1), 76-94. <https://doi.org/10.46303/jcsr.02.01.5>
- Butterworth, J., & Thwaites, G. (2013). *Thinking skills - critical thinking and problem solving*. Cambridge University Press.
- Buzan, T., & Abbott, S. (2012). *The ultimate book of mind maps*. Thorsons.

- Colorado, C. (n.d.). *Helping young children develop strong writing skills*. Retrieved November 15/2022, from Helping Young Children Develop Strong Writing Skills <https://www.colorincolorado.org/article/helping-young-children-develop-strong-writing-skills>
- Cottrell, S. (2005). *Critical thinking skills*. Palgrave Macmillan.
- Crawford, A., Saul, W., Mathews, S., & Makinster, J. (2005). *Teaching and learning strategies for the thinking classroom*. The International Debate Education Association.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. Routledge Falmer.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in education*. Routledge.
- Cremin, T., & Arthur, J. (2014). *Learning to teach in primary school*. Routledge.
- Creswell, J. (2009). *Research design-research design: Qualitative, quantitative, and mixed methods approaches*. Sage.
- Creswell, J. (2012). *Educational research*. Pearson.
- Hammond, L. D., Austin, K., Orcutt, S., & Rosso, J. (2001). *How people learn: Introduction to learning theories*. Retrieved September 10/2022 from <https://media.gradebuddy.com/documents/2034241/55fd7bf7-bf06-4147-a4a2-441aeca05ea8.pdf>
- Dickinson, D., Griffith, J., Golinkof, R. M., & Pasek, K. H. (2012). How reading books fosters language development around the World. *Child Development Research*, 1–17.
- Ekahitanond, V. (2011). Learn, think, act: Using movies to develop critical thinking skills. *Executive Journal*, 110–114.
- Ernawati, G. (2014, September). *The effect of brainstorming teaching technique on students' achievement in writing narrative paragraph*. Retrieved December 2022, from <https://123dok.com/document/q05198ly-brainstorming-teaching-technique-students-achievement-writing-narrative-paragraph.html>
- Fraenkel, J., Wallen, N., & Hyun, H. (2012). *How to design and evaluate research in education*. McGraw-Hill.
- Goodman, H. (1990). Developing critical thinking skills and improving expressive language through creative writing. Institute of Education Sciences, 100.
- Hanesova, D. (2014). Development of critical and creative thinking skills in CLIL. *Journal of Language and Cultural Education*, 33–51.

- Kagan, S. (2010). *Kagan Cooperative Learning structure for engagement*. Retrieved December 2022 http://mrseatonclass.weebly.com/uploads/3/2/1/7/32178559/kagan_structures_compiled_1.pdf
- Kalive, P. (n.d.). *What is thinking in psychology? 7 different types of thinking*. Retrieved December 13/ 2022 from <https://www.sociologygroup.com/types-of-thinking/>
- Kaya, M. M. (2022). Blind patriotism is out and constructive patriotism is in: Critical thinking is the key to global citizenship. *Journal of Social Studies Education Research*, 13(2), 103–124. <https://jsser.org/index.php/jsser/article/view/4074/564>
- Kumar, R. (2014). *Research methodology: A step- by- step guide for beginners*. Indiana U.S.A: Center for International Education, Development and Research.
- Marbun, P. P., & Ernidawati, T. (2015). The effect of applying interactive notation system for effective reading and thinking (INSERT) strategy on students' achievement in reading analytical exposition text. Register: *Journal of English Language Teaching of FBS-Unimed*,
- Metivier, A. (2022). *The 7 main types of thinking (and how to improve them)*. <https://www.magneticmemorymethod.com/types-of-thinking/>
- Musai, B. (2014). Metodologji e mësimdhënies [Methodology of teaching]. CDE.
- Palmer, D., & Witanapatirana, K. (2020). Exposing Bias through a Deficit Thinking Lens Using Content-Analysis of Macro Level Policies. *Research in Educational Policy and Management*, 2(1), 23-39
- Parmawati, A., Santoso, I., & Yana, Y. (2020,). Improving students' writing skill through roundtable techniques. *Eltin Journal*, 8(2), 103–111.
- Polat, S. (2020). Multidimensional Analysis of the Teaching Process of the Critical Thinking Skills. *Research in Social Sciences and Technology*, 5(2), 134-157. <https://doi.org/10.46303/ressat.05.02.8>
- Sapsuha, S., & Bugis, R. (2013). *Think pair share technique to improve students' reading*. ICE-Ed Conference. Asia
- Sieck, W. (2021, 20 September). A simple SQ3R reading method and study strategy. Retrieved September 12/2022 from <https://www.globalcognition.org/sq3r/>

- Sriyati, S., Mukhaiyar, M., & Rosa, R. N. (2019). The effect of using insert strategy and motivation on the reading comprehension of the second-grade students of SMPN 11 Sijunjung West sumatera. *International Journal of Civil Engineering and Technology*, 2(1) 1359–1368.
- Statistikat e arsimit në Kosovë 2021/2022. (2022, Qershor). [Education statistics in Kosovo 2021/2022]. <https://ask.rks-gov.net/media/6850/statistikat-e-arsimit-2021-2022.pdf>
- Tapung, M., Maryani, E., & Supriatna, N. (2018). Improving students' critical thinking skills in controlling social problems through the development of the emancipatory learning model for junior high school social studies in Manggarai. *Journal of Social Studies Education Research*, 9 (3), 162–176.
- Teaching and Learning Strategies. (2013). Retrieved November 13/2022 from <https://www.sdera.wa.edu.au/media/1235/teaching-and-learning-strategies.pdf>
- Thinking Differently. (2007). Retrieved November 28/2022 from <https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2017/11/Thinking-Differently-Book.pdf>
- Zwiers, J. (2005). Zhvillimi i shprehive të menduarit në klasat 6–12. [Development of thinking habits in grades 6–12]. CDE.