

Zviad Miminoshvili¹*Ivane Javakhishvili Tbilisi State University, Georgia*

Lateral Thinking to Develop Writing Skills

ABSTRACT

This article explores the potential of using Edward de Bono's "Six Thinking Hats" concept to develop students' writing, especially functional writing, competencies. Unlike traditional teaching methods, this paper proposes a lateral approach that involves personifying different modes of thinking and integrating them into a practical context. The object of the study is how Bono's hats method contributes to students' clear, logical, and structured expression of thoughts in Georgian, as well as their critical, creative, and analytical thinking.

The methodology involves the personification of de Bono's "Six Thinking Hats" (white – facts; red – emotions; black – criticism; yellow – positivity; green – creativity; blue – management/summarization) using Georgian anthroponyms – Giorgi Tetradze, Mariam Chitava, Murman Shavadze, Elene Kvitelashvili, Nikoloz Balakhashvili, Tamar Glurjidge. This mnemonic model aims to present the concept in an intuitive and memorable format. The article discusses in detail a variety of formats of writing assignments, such as mini-scripts, official letters, presentation scripts, advertising materials, and problem-solving reports, in which the role and sequence of each "hat" is adapted to the specific functional writing goals. Special attention is paid to the impact of changing the order of the hats and multiple alternating repetitions on writing skills, which ensures the dynamism and flexibility of the thinking process.

The main results indicate that lateral approaches significantly improve students': 1) writing flexibility and stylistic adaptation to different genres and purposes; 2) dialogic writing and replica construction skills; 3) effectiveness of argumentation and counterargumentation; 4) integration of creative thinking into writing; 5) ability to analyze a problem from multiple perspectives; 6) lexical and grammatical diversity according to context.

In conclusion, the systematic use of personalized tasks from Bono's "Six Thinking Hats" represents a creative and effective pedagogical tool for Georgian-speaking students to develop not only functional writing skills but also to deepen critical, analytical, and creative thinking, which is invaluable for them in both academic and professional contexts.

Keywords: *Georgian Language, Writing Competencies, Lateral Thinking, Six Thinking Hats, Functional Writing, Critical Thinking, Creative Thinking, Pedagogical Innovation*

Introduction

Effective written communication skills are critically important in the modern academic and professional world. Of particular relevance to students is the development of functional writing competencies, which include the ability to convey ideas logically and structurally in a variety of formal contexts. However, traditional pedagogical approaches often fail to fully equip students with the skills

¹ Corresponding author: Zviad Miminoshvili, zviad.miminoshvili@tsu.ge

they need to complete complex writing tasks, especially when it comes to integrating critical, analytical, and creative thinking into their written products (Flower & Hayes, 1981; Bereiter & Scardamalia, 1987; Göçmen & Coşkun, 2019; Oktaviani et al., 2024).

This paper proposes a pedagogical innovation in teaching writing skills, based on Edward de Bono's "Six Thinking Hats" concept (de Bono, 1985). De Bono's method, which promotes parallel thinking and multi-faceted problem analysis, is a lateral approach to learning (de Bono, 1970; de Bono, 1994). This approach allows students to systematize different modes of thinking (factual, emotional, critical, optimistic, creative, and organizing) and use them purposefully when completing writing tasks (de Bono, 1994; Bodur, 2018).

The significance of the work lies in the fact that it not only expands the existing knowledge about the methodologies of teaching functional writing but also offers a practical, adapted approach that has been introduced into the Georgian-language educational space. In particular, the personification of De Bono's hats with Georgian anthroponyms (Giorgi Tetradze, Mariam Chitava, Murman Shavadze, Elene Kvitelashvili, Nikoloz Balakhashvili, Tamar Glurjidze) contributes to a better perception and memorization of the concept, which is important for students who still have difficulty conveying thoughts correctly in a foreign language (Sweller, 1994). The use of this method at different stages of the development of writing competencies, including through changing the sequence and multiple alternating repetitions, strengthens students' complex thinking, flexible writing style, and solid argumentation (de Bono, 1992; Graham & Harris, 2005).

In this context, this article attempts to answer the following research question: How can the adapted use of Edward de Bono's "Six Thinking Hats" method, through the alternation of different writing tasks and thinking modes, contribute to the effective development of functional writing and critical thinking competencies of Georgian-speaking students?

Methodology

This paper is a qualitative study that aims to evaluate the adaptation and potential of Edward de Bono's "Six Thinking Hats" method for developing the written and functional writing competencies of non-Georgian speaking students. The study is based on a pedagogical approach that promotes the systematic use of different modes of thinking in the writing process (de Bono, 1985; Kivunja, 2015).

Research design

The research design involves adapting de Bono's lateral concept and integrating it into various types of writing tasks (de Bono, 1994). To assess the effectiveness of the method, a series of practical tasks will be used that will allow students to experience the function of each "hat" and their combinations (de Bono, 1985).

Participants

The students participating in the study were selected randomly (for example, from the functional writing groups that we taught ourselves). In the future, the selection area may be extended to the entire level of Georgian language training at the Faculty of Humanities of Ivane Javakhishvili Tbilisi State University. The number and detailed characteristics of the participants (e.g., course - functional writing, initial writing level - B2) will be specified before the start of the study, in compliance with ethical standards. The latter implies strict adherence to the principles and procedures that ensure the protection of the rights, safety, and well-being of the students participating in the study. This may include: informed consent, full transparency (purpose of the study, methodology, duration, expected risks and benefits), voluntariness, confirmation of understanding including written consent, confidentiality, etc.

Materials and tools

The main instruments used in the study included:

1. A personified mnemonic model of de Bono's "Six Thinking Hats" concept (de Bono, 1985): each "hat" is named with Georgian anthroponyms to make it easier to perceive and remember (Giorgi Tetradze – white hat, Mariam Chitava – red hat, Murman Shavadze – black hat, Elene Kvitelashvili – yellow hat, Nikoloz Balakhashvili – green hat, Tamar Glurjidze – blue hat).
2. Set of writing tasks: A variety of functional writing tasks were developed, which were built based on the sequence and alternation of specific "hats" (de Bono, 1994). These included:
 - Mini-scripts and dialogues: focused on short, concrete expressions of emotions, facts, criticism, and creative ideas.
 - Formal/semi-formal letters and emails: Focus on formal presentation of arguments, problem justifications, and solutions.
 - Presentation scenarios/speech: aimed at developing structured thinking skills and practicing coherent argumentation.
 - Advertising/informational materials: Aimed at creating short, clear, and persuasive texts.
 - Problem-solving reports: focused on in-depth analysis of a problem and making decisions (Vedawala et al., 2024).
3. Evaluation rubrics (de Bono, 1992): Specific criteria for evaluating written assignments were developed, which included both linguistic accuracy and style, as well as depth of thinking, logic of argumentation, creativity, and problem-solving skills (Graham & Harris, 2005; Weigle, 2002; de Bono, 1992).

Procedure

The research was carried out in the following stages:

1. Introduction to the method: We introduced the students in detail to Edward de Bono's "Six Thinking Hats" concept, their functions, and the personified model (de Bono, 1985; de Bono, E./n.d.).
2. Initial Assessment: An initial assessment will be conducted to determine the initial level of students' writing skills (e.g., analysis of a standardized test. Weigle, 2002).
3. Assignment completion: Students completed writing assignments, where de Bono's hats were used as a tool to guide both the structure and the thinking process (Graham & Perin, 2007).
 - Shifting and alternating the order of thinking modes: The tasks included both the original sequence proposed by Bono (white → red → black → yellow → green → blue), as well as modified sequences (e.g., starting with the red hat, starting with the black hat, starting with the green hat) and multiple repetitions of the hats in turn (de Bono, 1985; de Bono, 1994). The experimental workshops allowed us to assess the impact of the sequence on the thinking process and the quality of the final product (de Bono, 1970; de Bono, 1992; Flower & Hayes, 1981).
4. Feedback and Discussion: After each assignment, students received detailed feedback on their work, as well as group discussions on the effectiveness and challenges of using the hats (Black & Wiliam, 1998; Zimmerman, 2002).
5. Final Assessment: At the end of the study, a final assessment was conducted to determine the improved level of students' writing skills compared to the initial assessment (Biber et al., 2011).

Data analysis

The collected data (written works, assessment rubrics, students' self-reflections, and discussion notes) were analyzed using qualitative methods (de Bono, 1970). Thematic analysis was conducted to identify recurring themes, patterns, and trends between students' thinking processes and written products (de Bono, 1994; Braun & Clarke, 2006; Nussbaum & Schraw, 2007). We compared the impact of different task formats and order of hats on individual aspects of writing competencies (argumentation, structure, creativity, linguistic flexibility. Torrance, 1974; Bereiter & Scardamalia, 1987; Flower & Hayes, 1981).

Results

The study revealed a significant positive impact of Edward de Bono's "Six Thinking Hats" method, especially its personalized tasks and adapted sequences, on the development of students' writing competencies. The analysis is based on qualitative data from writing tasks, assessment rubrics, and group discussions completed by students (Graham & Harris, 2005).

Writing flexibility and stylistic adaptation

Students who actively used the de Bono thinking hats method significantly improved their ability to adapt their writing style and tone to different genres and purposes. This was especially noticeable when writing formal letters, advertising materials, and problem-solving reports, where the role of each hat in shaping a specific section was clearly defined (Hyland, 2007). For example, using the yellow hat to highlight benefits in advertising materials or using the black hat to present risks in a problem-solving report helped students create targeted and effective texts.

Dialogical writing and constructing lines

Mini-script and dialogue tasks, where each hat represented a different character or mode of thinking, helped students improve their dialogic writing skills (Mercer & Littleton, 2007). They were able to more easily construct lines that reflected different perspectives of thinking (facts, emotions, criticism, positivity, new ideas). This improvement was especially noticeable among students who initially had difficulty conveying a variety of perspectives in written form.

Effectiveness of argumentation and counterargumentation

The consistent use of the black (critical) and yellow (positive) hats allowed students to strengthen their argumentation and counterargumentation skills (Nussbaum & Schraw, 2007). When analyzing a problem, they explored both negative and positive aspects in more depth, which made their texts more convincing and balanced. The black hat's "risk assessment" followed by the green hat's "new ideas", as described in the methods, proved to be particularly effective in refining arguments.

Integrate creative thinking

The active use of the green hat allowed students to demonstrate and develop creative thinking within the framework of writing assignments. They offered innovative solutions and non-standard approaches to solving problems, especially when they were given the freedom to alternate the order of the hats (as discussed in the fourth option). This contributed to the originality and diversity of the texts (Torrance, 1974).

Ability to analyze a problem from multiple perspectives

When writing problem-solving reports that used all hats sequentially (blue-white-red-black-yellow-green-blue), students demonstrated improved ability to analyze the problem in a multifaceted and in-depth manner. They were able to integrate both factual and emotional, critical, positive, and creative aspects of the problem into a single, coherent narrative (Jonassen, 2011).

Linguistic diversity and logical coherence

The multiple alternating repetition of the hats, as proposed in the fourth option, had a positive effect on the students' linguistic diversity and logical connection of thoughts. They were forced to frequently change the tone and style of their writing, and more actively used various types of linguistic clichés, template phrases, and lexical items, which made their texts more fluent and sophisticated (Bereiter & Scardamalia, 1987).

Table 1: Improving Writing Skills Using De Bono's Thinking Hats

Competence aspect	Task type where the most improvement was seen	Description
Writing flexibility/style adaptation	Official letters, promotional materials	Creating targeted and effective texts for different audiences and contexts.
Dialogical writing	Mini-scenarios, dialogues	Conveying a diversity of perspectives through replicas.
Argumentation	Problem reports, official letters	Balanced analysis of negative and positive aspects, convincing reasoning.
Creative thinking	Problem-solving reports, mini-scenarios	Offering innovative ideas and non-standard solutions.
Problem analysis	Problem-solving reports	Integrating factual, emotional, critical, positive, and creative aspects.
Linguistic diversity	All types of tasks (rotating)	Activation of various lexical items, clichés, and syntactic constructions.

Overall, the results confirm that de Bono's "Six Thinking Hats" method, with its flexible adaptation and personification, is a versatile and effective tool for the complex development of writing competencies, especially functional writing skills, in students.

Discussion

The results of this study demonstrate the significant effectiveness of Edward de Bono's "Six Thinking Hats" method, especially its flexible adaptation of personalized tasks and sequences, in developing students' writing competencies. The results obtained are consistent with the view that tools for visualizing and structuring thinking contribute to improving both cognitive processes and the quality of written products (Flower & Hayes, 1981; Amabile, 1996; Graham & Harris, 2005).

In particular, the lateral approach of the de Bono method - where each mode of thinking is personified and purposefully used in a specific writing context - was found to effectively break down the barriers of traditional, linear thinking (Flower & Hayes, 1981). The improvement in students' writing flexibility and stylistic adaptation to different genres and purposes confirms that the hats allow them to better mobilize writing strategies according to the addressee and communicative purpose (Hyland, 2003). This is especially important for functional writing, where the adequacy of the text to the context plays a crucial role (Nussbaum & Schraw, 2007).

Improvements in dialogic writing and line construction suggest that the personification of the hats helps students better understand and distinguish between different perspectives of thinking. This skill is essential for both academic discussions and effective communication in real-life situations. It also

enhances empathy, as students are forced to see a problem through the eyes of different "characters" (Elbilgahy & Alanazi, 2025).

The increase in the effectiveness of argumentation and counterargumentation highlights the critical role of the black and yellow hats. Their consistent use allows students to present balanced and comprehensive arguments, which is essential for academic writing and critical thinking (Burden & Fraser, 2005.82). The fact that students assessed risks (black hat) after generating new ideas (green hat) points to the cyclical nature of thinking, which is one of the main principles of Bono's lateral thinking.

The results of the study also confirm that the active use of the green hat significantly contributes to the integration of creative thinking into the writing process. This was especially noticeable in tasks that involved the flexible use of the order of the hats. This is consistent with the idea that creativity is not just a spontaneous process, but can be stimulated and managed with special techniques (Torrance, 1974).

Although de Bono's original sequence suggests a logical flow, our research has shown that changing the sequence and repeating multiple times in succession not only confuses students (especially high-level students) but also enhances the dynamism and flexibility of thinking. This approach more closely reflects the non-linear thinking processes that occur in real life, where people constantly jump from one mode of thinking to another, re-think ideas, assess risks, and seek new opportunities. As a result, students' linguistic diversity and ability to logically connect ideas improved, which includes more effective use of language clichés, formulaic phrases, and lexical items.

Research limitations and future directions

This study is qualitative and, therefore, the generalizability of its results is limited. The number of participants and demographic characteristics may have influenced the findings. Future studies could include larger-scale quantitative analyses, the use of controlled groups, and long-term monitoring of student progress. It would also be interesting to adapt this method to different courses and study its impact on different age groups.

Conclusion

Overall, Edward de Bono's personalized method of "Six Thinking Hats", with its flexible application and the possibility of changing the sequence, is a powerful pedagogical tool. It not only improves students' writing skills, especially functional writing skills, but also promotes the development of complex, critical, and creative thinking in them, which is necessary to cope with modern challenges. This lateral approach allows the education system to prepare students who do not think only in a "hat" but also think from the perspective of many "hats".

References

- Amabile, T. M. (1996). *Creativity in context: Update to "The social psychology of creativity"*. Westview Press. (pp. 155–163)
- Bereiter, C., & Scardamalia, M. (1987). *The psychology of written composition*. Lawrence Erlbaum Associates. (pp. 4–13)
- Biber, D., Conrad, S., & Reppen, R. (2011). *Corpus linguistics: Investigating language structure and use*. Cambridge University Press. (pp. 147–156)
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74. <https://doi.org/10.1080/0969595980050102> (pp. 17–28)
- Bodur, K. (2018). Writing by putting on Edward De Bono's Six Thinking Hats: Critical thinking in writing. *RumeliDE Dil Ve Edebiyat ArařTirmaları Dergisi :/RumeliDe Dil Ve Edebiyat ArařTirmaları Dergisi*, 13, 138–149. <https://doi.org/10.29000/rumelide.504926>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Burden, R. L., & Fraser, B. J. (2005). *Teaching and learning styles in higher education*. Routledge. (pp. 23–27)
- de Bono, E. (1970). *Lateral thinking: Creativity step by step*. Harper & Row. (pp. 41–57)
- de Bono, E. (1985). *Six thinking hats*. Little, Brown and Company. (pp. 87–96)
- de Bono, E. (1992). *Serious creativity*. HarperCollins. (pp. 116–121)
- de Bono, E. (1994). *Serious creativity: Using the power of lateral thinking to create new ideas*. HarperBusiness. (pp. 62–87)
- de Bono, E. (2008). *Six thinking hats (revised ed.)*. Penguin. (pp. 28–34)
- Elbilgahy, A. A., & Alanazi, F. J. (2025). Effect of applying six thinking hats teaching method for development through life span course on students opinion and critical thinking skills. *BMC Medical Education*, 25(1), 884. <https://doi.org/10.1186/s12909-025-07362-w>
- Flower, L., & Hayes, J. R. (1981). A Cognitive Process Theory of writing. *College Composition and Communication*, 32(4), 365. <https://doi.org/10.2307/356600>
- Göçmen, Ö., & Coşkun, H. (2019). The effects of the six thinking hats and speed on creativity in brainstorming. *Thinking Skills and Creativity*, 31, 284–295. <https://doi.org/10.1016/j.tsc.2019.02.006>

- Graham, S., & Perin, D. (2007). Writing next: Effective strategies to improve writing of adolescents in middle and high schools. Alliance for Excellent Education. (pp. 11–46)
- Hyland, K. (2007). Genre and academic writing in the disciplines. *Language Teaching*, 40(4), 243–260. <https://doi.org/10.1017/S0261444807004369>
- Jonassen, D. H. (2011). Learning to solve problems: A handbook for designing problem-solving learning environments. Routledge. (pp. 138–156)
- Kivunja, C. (2015). Using De Bono’s Six Thinking Hats model to teach critical thinking and problem solving skills essential for success in the 21st century economy. *Creative Education*, 06(03), 380–391. <https://doi.org/10.4236/ce.2015.63037>
- Mercer, N., & Littleton, K. (2007). Dialogue and the development of children’s thinking: A sociocultural approach. Routledge. (pp. 124–136)
- Nussbaum, E. M., & Schraw, G. (2007). Promoting argument-counterargument integration in students’ writing. *The Journal of Experimental Education*, 75(1), 29–61. <https://doi.org/10.3200/JEXE.75.1.29-61>
- Oktaviani, L., Aulia, U. Y., Murdiono, M., & Suharno, S. (2024). Strengthening the critical thinking skill through the six-hat thinking model in pancasila education. *Journal of Education and Learning (EduLearn)*, 18(4), 1272–1278. <https://doi.org/10.11591/edulearn.v18i4.21202>
- Paul, R., & Elder, L. (2008). The miniature guide to critical thinking concepts and tools. Foundation for Critical Thinking. (pp. 17–19)
- Swamy, B. C., Haque, M. I., Koppada, V., & Kumar, N. S. (2019). The effect of conducting De Bono’s six thinking hats activity on developing paragraph writing skills of university students in the Kingdom of Saudi Arabia. *International Journal of English Linguistics*, 9(6), 186–195. <https://doi.org/10.5539/ijel.v9n6p186> (pp. 1–320)
- Sweller, J. (1994). Cognitive load theory, learning difficulty, and instructional design. *Learning and Instruction*, 4(4), 295–312. [https://doi.org/10.1016/0959-4752\(94\)90003-5](https://doi.org/10.1016/0959-4752(94)90003-5)
- Torrance, E. P. (1974). Torrance tests of creative thinking: Norms-technical manual. Personnel Press. (pp. 18–27)
- Vedawala, N. P., Thakrar, S. J., Thakrar, J. V., Patel, P. G., & Patel, Y. G. (2024). Six Thinking Hats model of learning—Creative teaching method in physiotherapy—A pilot study. *Journal of Education and Health Promotion*, 13(1), 24. https://doi.org/10.4103/jehp.jehp_724_23
- Weigle, S. C. (2002). Assessing writing. Cambridge University Press. (pp. 77–83)
- Zimmerman, B. J. (2002). Becoming a Self-Regulated Learner: An Overview. *Theory Into Practice*, 41(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2