MAIN ISSUES OF PEDAGOGY AND PSYCHOLOGY (MIOPAP)
https://miopap.aspu.am/

# THE FEATURES OF CHESS TEACHERS TRAINING IN ARMENIA[††]

**DOI:10.24234/miopap.v11i2.44**

**Emma Kostanyan,** *Khachatur Abovyan Armenian State Pedagogical University, "Chess" Scientific Research Institute "Yerevak" Educational Complex, Republic of Armenia*

***Email:*** *kostanian22@mail.ru*

**Samvel Misakyan,** *Khachatur Abovyan Armenian State Pedagogical University, "Chess" Scientific Research Institute, Republic of Armenia*

***Email:*** *misakyan_samvel@mail.ru*

**Lusine Gharakhanyan,** *Khachatur Abovyan Armenian State Pedagogical University, "Chess" Scientific Research Institute, Republic of Armenia*

***Email:*** *lus78@yandex.ru*

***Abstract***

*In the article, we present the principles on which we conduct retraining, the specific features we consider when writing retraining programs, and teacher feedback. We have conducted research with teachers, the results of which have shown what factors, according to the teachers, enhance the effectiveness of teaching younger students as a result of retraining. Our research allows us to design the retraining program more effectively.*

*The research results clarify which teaching methods teachers use that are more effective. Our research goal is to identify effective teaching methods that contribute to developing younger students' chess skills. During the research, we discovered that applying teaching methods during group work helps teachers implement these methods and identify challenges specifically in the context of group activities. Meanwhile, the instructor can provide feedback during training.*

***Keywords****: chess teachers training, teaching methods, professional development, teachers training program, research, younger schoolchildren, knowledge, skills, methodology, studies, emotional and physical growth.*

## INTRODUCTION

**Historical background of the problem.** Starting in 2013, a group of researchers at the Khachatur Abovyan Armenian State Pedagogical University's "Chess" Scientific Research Institute initiated an exploration into the role and efficacy of chess within public school settings. Our studies have been conducted in public schools of the Republic of Armenia, where chess is mandatory. The

research involved teachers who teach chess in the 2nd to 4th grades. (Gevorgyan, Ispiryan, Sargsyan, 2023, Gevorgyan, Sargsyan, Manukyan, 2023). Many studies show the effectiveness of chess teaching in primary school and the connections we discover between these studies and chess teaching program methods, principles, strategies, etc.

The primary focus of chess teacher education models is cultivating candidates' understanding of "learning to know as a teacher." This entails expanding their knowledge regarding the fundamental components of the teaching-learning dynamic and evaluating this knowledge through practical application in school settings. Comparatively, less emphasis is placed on honing practical skills and instilling the values essential for guiding teachers' professional practice. Drawing from our extensive experience in Chess teacher training, we have recognized the necessity of considering specific features when structuring these training sessions. Addressing the existing knowledge of prospective teachers involves recognizing that they bring with them a prior understanding of teaching practices, having been students themselves in previous educational systems. This prior knowledge significantly shapes their preconceptions, beliefs, and perspectives regarding the teaching-learning process.

Another challenge is the gap between theoretical learning and practical application. While teacher preparation programs vary widely across the globe, they all share the objective of helping student teachers apply their theoretical knowledge in real-world teaching scenarios. However, numerous studies have underscored the disconnection between teacher education courses and their relevance to everyday school experiences. (Orgoványi-Gajdos Judit, 2016)

Our chess teacher training program is designed to cater to both groups of teachers. Experienced teachers with years of professional practice typically possess high self-regulation, content expertise, and problem-solving abilities. The extent of these skills varies depending on their career stage, whether they are at the competent, proficient, or expert level. (Berliner, 1988), (Glaser, 1987). Their experience in classroom settings cultivates greater confidence, leading to a more pronounced sense of "professional orientation." (Tann, 1994)Their primary concerns revolve around addressing the needs of their students and improving their teaching practices rather than focusing on their own identity and development as educators. (Fuller, Parsons, & Watkins, 1974)

## PROBLEM STATEMENT

What difficulties do chess instructors encounter as they progress in their careers? Why is it

crucial to adapt problem-solving approaches at various teaching stages? How does the Chess Teachers Training Program for Teachers' Professional Development on Problem Solving aim to equip educators to address these difficulties? This section aims to address these inquiries. In this paper, we retrace the approaches and principles we had during chess teachers' training from 2011 to 2023.

## METHODS AND METHODOLOGY

We conducted a study with chess teachers who indicated what is most important for enhancing the effectiveness of teaching the subject during the training. The research was carried out using questionnaires, and teachers were given open-ended questions. The study was conducted using the same training program with three groups, and we present the averaged data of the three groups in the diagram below. One hundred chess teachers who teach in grades 2nd-4th participated in the study.

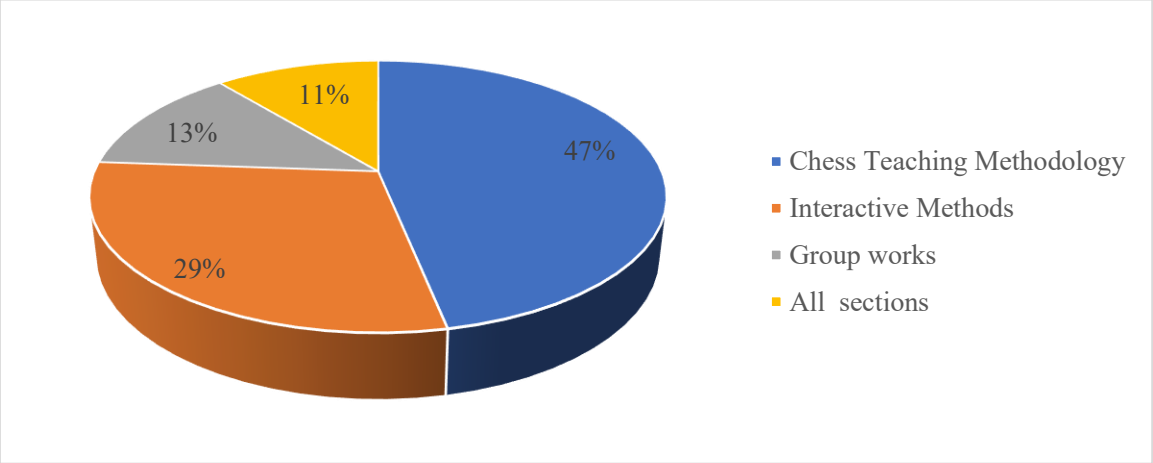


**Diagram 1: Chess Teachers' Opinions on the Chess Teachers Training Program**

**Results.** The research revealed that the methodology of teaching chess is essential for most teachers. 29% indicated that teaching interactive methods is effective, 13% mentioned group work, and 11% referred to all the mentioned topics.

**Discussion.** The research is effective because it is a basis for developing training programs during topic changes. Teachers have presented topics whose study enables them to organize a more effective learning process in the classroom. Continuous monitoring allows for improving the training process and creating educational materials teachers identify as necessary.

They develop their mental frameworks and become increasingly adept at navigating teaching situations through routine practice. Our research indicates that competency-based professional development advocates for setting clear, measurable objectives regarding the knowledge, skills, and behaviours teachers should attain by the end of their training. We have explored the potential of linking chess teacher training and professional development to attaining specific competencies, sparking interest from educational systems, agencies, and institutions. However, there remains a lack of consensus regarding the definition of "competencies" or the specific competencies that should be fostered through initial teacher education or professional development courses. Defining "competency" is challenging due to its various interpretations, leading competency-based training to be likened to "a bandwagon in search of a definition." This ambiguity also applies to "competency-based teacher education" today.

The competencies specified in some courses are the minimum or threshold necessary to perform particular teaching activities; in others, they are those characteristic of the ‘good or effective teacher.’ More generally, there are differing views about whether competence is a specific achievement or a dimension of performance necessary for performing at different levels. For this article, ‘competency’ refers to knowledge, attitudes, skills, and behaviours that facilitate children's intellectual, social, emotional, and physical growth. So, we underline some fundamental points on which we built the Chess Teachers Training Program in Armenia.

1. The practices of effective teachers inform program criteria: Rather than focusing on the systematic study of disciplines like psychology or mathematics, the Chess Teachers Training Program is structured around the conceptualizations of teaching "best practices." This approach considers what teachers need to know, be capable of doing, and achieve, with graduation criteria aligned with these outcomes. Moreover, the competencies integrated into the program's content are thoughtfully chosen to align with the tasks teachers routinely undertake, which research has shown to correlate with student success.

2. Criteria are articulated as competencies: Program requirements outline what students must demonstrate to complete the program successfully. These criteria emphasize observable actions (e.g., 'utilize,' 'organize,' 'sequence learning') while avoiding abstract concepts like 'understand' or 'perceive.' The emphasis lies not merely on teachers' teaching knowledge but on their ability to teach and foster effective student growth.

3. Instruction and assessment are closely tied to competencies: Competencies are defined

before the program's implementation and communicated to learners.

4. Alongside the core principles of this approach, there are implicit and associated characteristics:

(a) Instruction is tailored to the individual: Participants are encouraged to progress at their own pace, and their existing knowledge and skills are assessed at the outset, allowing those with adequate proficiency to bypass training in already mastered competencies.

(b) Student learning is guided by feedback: Each participant receives personalized feedback based on their performance, pinpointing areas for further enhancement.

(c) The program follows a systematic structure: It entails a scheduled series of meetings and a predefined curriculum to be covered.

Experienced teachers encounter a significant challenge related to the development of schematic thinking over time. Schemata represent abstract knowledge structures that consolidate information from numerous specific cases and their diverse relationships. (Leinhardt, Greeno, 1986)

Schemata can be described as an "organized network of facts, concepts, generalizations, and experiences" that teachers construct over time based on their accumulated experiences. (Reagan, Case, Brubacher, 2000)

As teachers gain experience, their thinking and behaviour tend to become more directed by routine, particularly in certain aspects of the teaching process. Here, routine refers to a pattern of specific actions, an automated approach to handling situations that develops through teaching experiences.

We also conduct training sessions for "new teachers," who we define as individuals with no more than three years of teaching experience. These teachers are in the early stages of their careers and possess moderate teaching experience. It is a transitional phase wherein they have a mentor (similar to student teachers) but work independently with classes (akin to experienced teachers). This setup allows them to gain more practice in self-monitoring through their apprenticeship. (Glaser, 1996)

The demands of transitioning from the student-teacher stage to becoming an effective teacher necessitate cultivating problem-solving skills right from the onset of one's teaching career. Silverman emphasizes that students must be provided opportunities to bridge the gap between theoretical knowledge and practical application. This involves fostering thoughtful, creative problem-solving abilities. Students must practice analyzing problems, posing pertinent questions,

exploring different responses, debating for or against various solutions, and recognizing that problems may have multiple answers. Developing these skills is crucial for aspiring teachers to effectively address challenges and arrive at successful solutions in their teaching practice. (Silverman,1990)

In our program, Self-Case Reflection is a unique metacognitive process designed to address individual pedagogical challenges with the support of various thinking tools and techniques. Throughout the training process, participants work through their pedagogical cases drawn from their real-life experiences in schools. The course, outlined in this book, offers participants the necessary support to identify solutions to their challenges by presenting diverse perspectives, techniques, methods, and activities. (Orgoványi-Gajdos Judit, 2016)

## CONCLUSION AND FINDINGS

We reveal that at the end of the Chess Teachers Training program, participants will know and be able to use thinking frames, tools, and techniques on all levels of the problem-solving process when they work in groups. They can transfer their theoretical knowledge into practice and move from reproductive thinking to a more productive and adaptive. They will also be able to see their challenges as part of a system and consciously follow their cognitive process from perception to the solution of their problems.

***Acknowledgments:*** *The authors thank the editors and anonymous reviewers for their constructive feedback.*

***Funding:*** *This study was not supported by internal or external funding sources. All research presented in the article was conducted at the expense of the author(s).*

***Availability of data and materials:*** *All supporting data generated or analyzed for this study are available upon request.*

***Ethics approval and consent to participate:*** *Not applicable.*

***Consent for publication****: Not applicable.*

***Competing interests****: The authors declare that they have no competing interests.*

## REFERENCES

**Berliner, D. C. (1988).** The development of expertise in pedagogy. New Orleans, LA: American Association of Colleges for Teacher Education.

**Fuller, F. F., Parsons, J. S., & Watkins, J. E. (1974).** Concerns of teachers: Research and reconceptualization. Austin, TX: Research and Development Center for Teacher Education, The University of Texas.

**Gevorgyan, Srbuhi, Ispiryan Mariam, Sargsyan Vahan,** Research and Experience of Teaching

the Subject "Chess" in the Educational System of the Republic of Armenia**,** Psychological Science and Education 28(6), 2023.

**Glaser, R. (1987).** Thoughts on expertise. In C. Schooler & K. W. Schaie (Eds.), Cognitive functioning and social life structure over the life course (pp. 81–94). Norwood, NJ: Ablex.

**Glaser, R. (1996).** Changing the agency for learning: Acquiring expert performance. In K. A. Ericsson (Ed.), The road to excellence: The acquisition of expert performance in the arts and sciences, sports, and games (pp. 303–311). Mahwah, NH: Erlbaum.

**Leinhardt, G., & Greeno, J. G. (1986).** The cognitive skill of teaching. Journal of Educational Psychology, 78(2), pp. 75–95.

**Orgoványi-Gajdos Judit, Teachers'** Professional Development on Problem Solving, Theory and Practice for Teachers and Teacher Educators, Eszterházy Károly University of Applied Sciences, Hungary, 2016.

**Reagan, T., Case, C., & Brubacher, J. (2000).** Becoming a reflective educator: How to build a culture of inquiry in the schools (2nd ed.). Thousand Oaks, CA: Corwin Press.

**Silverman, R., & Welty, W. M. (1990).** Teaching with cases. Journal on Excellence in College Teaching, pp. 1, pp. 88–97.

**Tann S. (1994).** Supporting the student teacher in the classroom. In M. Wilkin & D. Sankey (Eds.), Collaboration and transition in initial teacher training (pp. 94–106). London: Kogan Page.

***Received: 12/01/ 2024***
***Accepted: 15/ 04/ 2024***