

Preparation of University Students in Teacher Education Programs in the Context of Current Social Demands: An Example of Good Practice from the Czech Republic

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This article presents a practice-based example of innovation in teacher education in the Czech Republic, addressing current social and educational demands on future teachers. It focuses on a course titled *Literature for Children and Youth* at Palacký University in Olomouc. The article describes the design and implementation of an instructional project in which student teachers created educational board games based on children's literature. This hands-on activity was designed to support didactic design competence, creative and graphic literacy, lesson-planning skills, and collaborative communication. It also created opportunities for students to translate curricular standards into age-appropriate learning activities and to reflect on the pedagogical use of literary content in primary education. As a practice-based reflective account, the article does not claim causal evidence regarding student learning outcomes. Instead, it documents one course model, its pedagogical rationale, and its perceived educational value in the context of contemporary teacher education. The article also highlights the importance of integrating such practice-oriented and competence-focused tasks more systematically into teacher education programs

Keywords: teacher education; competence-based learning; didactic creativity; game-based learning; literature for children; practice-based experience; pedagogical innovation

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Teacher education in the Czech Republic is currently shaped by curricular reform, growing emphasis on competence-based education, and increasing expectations regarding teachers' ability to design meaningful, inclusive, and motivating learning activities. These developments place new demands on university programs preparing future primary school teachers, especially in courses that connect subject content with didactic application.

This article presents a practice-based example from the course *Literature for Children and Youth* at Palacký University in Olomouc. The article focuses on an instructional project in which student teachers designed educational board games based on children's literature for use in the first years of primary education.

The aim of the article is to describe the design, implementation, and perceived educational value of this course assignment as an example of competence-oriented teacher preparation. More specifically, the article examines how the activity supported the development of selected professional competences relevant to future primary school teachers, particularly didactic design, curriculum transformation, collaborative planning, and creative work with literary content.

Because this paper is a practice-based reflective account rather than an empirical cause-and-effect study, it does not test hypotheses about student outcomes. Instead, it documents one course model, its pedagogical rationale, its implementation, and the professional learning opportunities it appears to offer in the context of contemporary teacher education.

At the same time, the article retains a broader focus on current developments in teacher education, especially the shift from a predominantly knowledge-based conception of preparation toward the cultivation of professional competences, reflective practice, and innovative forms of pedagogical work.

Competency Framework for Education

Contemporary educational policy in the Czech Republic, in line with broader European trends, places increasing emphasis on the development of key competences rather than the accumulation of factual knowledge. At the university level, this shift is reflected in efforts to promote active, creative, and collaborative learning environments that equip future teachers with the skills needed to guide pupils in a rapidly changing society. For example, the development of entrepreneurial, project-based, and collaborative competences is understood as central to preparing students for flexible professional roles and for participation in innovation-oriented educational settings (Slabová & Rolínek, 2021).

In school education, the development of social and communicative competences has become a priority, with an emphasis on environments that foster interpersonal relationships, moral reasoning, and cooperative problem solving - skills essential for pupils' socialization and future societal engagement (Lendel, 2024). Parallel to this, the integration of digital competences into the Czech curriculum, starting from pre-school onward, underscores the importance of supporting computational thinking, digital literacy, and responsible use of technology as fundamental prerequisites for

participation in contemporary society (Adamec & Miškelová, 2022; Kostolányová et al., 2023).

These developments collectively illustrate a decisive shift toward viewing competences - rather than isolated knowledge - as the core outcomes of education. Such a perspective aligns closely with creative and innovative approaches to teaching that prioritize critical thinking, learner autonomy, and personal growth. In the preparation of future first-grade primary school teachers, this requires training that enables students to design meaningful learning activities, transform curricular requirements into engaging tasks, and creatively adapt literary and other content for young learners.

For the purposes of this article, competency-based education is understood as an approach that foregrounds demonstrable professional competences and the meaningful application of knowledge, skills, and dispositions in authentic educational tasks. In teacher education, this includes the ability to transform curricular content into age-appropriate activities, to design inclusive learning opportunities, to collaborate with others, and to reflect critically on pedagogical choices.

A key concept in this study is didactic design competence. In this article, didactic design competence refers to the ability of future teachers to select educational content, formulate learning objectives, design appropriate learning tasks and materials, and align these with the developmental needs of pupils and the intended educational outcomes. In the present course assignment, this competence was operationalised through the design of an educational board game based on children's literature.

The teaching concept presented in this article builds on these principles: by engaging student teachers in the creation of educational board games, it seeks to cultivate didactic design competence, collaborative problem solving, and creative thinking within a competence-based educational framework.

Innovative Educational Methods

Innovative educational methods that foster critical thinking, creativity, and personal growth are increasingly seen as a core requirement in contemporary teacher education. Recent studies emphasise approaches that actively engage students in designing learning processes rather than merely receiving information. Experiential and project-based learning are highlighted as effective strategies for connecting theory with practice and for supporting creative problem solving and reflection (Dighliya, 2025). Game-based learning and gamification, particularly when combined with digital tools or *STEAM* principles, have been shown to enhance students' creative thinking, motivation, and capacity to tackle complex tasks (Juliangkary et al., 2024). In vocational and professional education, interactive and competence-oriented methods are especially effective in developing creative and transferable competencies needed in the 21st-century workforce (Mavluda, 2024).

Within higher education, innovative teaching practices such as flipped classrooms, personalized learning pathways, and collaborative techniques contribute to deeper engagement and understanding by addressing diverse learning styles and encouraging active participation (Gampala, 2023). Approaches that integrate prob-

lem-based tasks, research-oriented activities, and structured classroom discussion further support the development of critical and creative thinking (Seechaliao, 2017). Importantly, these methods align with a competence-based conception of teacher education, in which student teachers are expected not only to master subject content but also to design meaningful, inclusive, and motivating learning experiences for their future pupils.

In this article, we focus on one concrete example of such an innovative method implemented in the course *Literature for Children and Youth* at Palacký University in Olomouc. In the academic year 2024/2025, the course was attended by 100 students in their second year of the primary teacher education program. For the board-game project, students worked in small groups of four members, which resulted in 25 groups. Each group was tasked with designing an original educational board game based on selected children's literature for the first years of primary school. The activity was organized as collaborative project work: within each group, students jointly selected a literary topic, defined learning objectives in line with the curriculum, designed the rules and mechanics of the game, and considered how the game could be used in real classroom situations. Through this process, they were expected to develop didactic design competence, creative and visual thinking, and cooperative planning - competences that are central to innovative, competence-based teacher education.

The creation of board games as a tool for developing the competences of future first-grade teachers is also supported by research on game-based learning in teacher education. Studies show that the co-creation of serious games can effectively integrate primary-education-oriented competences into gameplay and provide a practical and engaging way for teachers to develop these skills (Eguia-Gómez et al., 2014). The development of board games for professional learning, such as those introducing teachers to lesson study, has demonstrated the potential of games to foster collaboration, motivation, and reflection in teacher development (Kager et al., 2024). Other research indicates that innovative games can support methodological competence and pedagogical content knowledge, particularly when student teachers are involved in planning, producing, and testing educational materials themselves (Huang et al., 2012; Botes, 2024; Addleman et al., 2024).

The cooperative creation of educational board games is expected to contribute to the development of several interrelated competencies in student teachers, including:

- Selecting and didactically transforming curricular content regarding the needs and abilities of first-grade primary school pupils;
- Undertaking activities to develop creative and visual thinking, with attention to the graphic appeal and usability of materials for young learners;
- Planning the teaching process, including anticipating how the game will be introduced, played, and followed up in a real classroom.

Taken together, these studies suggest that game-based and co-creative design tasks can provide meaningful opportunities for future teachers to connect content knowledge, pedagogical reasoning, collaborative work, and reflection. The present article builds on this line of work by presenting a contextualized example from Czech teacher education focused on children's literature and educational board-game design.

Methodology

This paper is a practice-based descriptive and reflective account of one instructional intervention in teacher education. It is not an experimental, quasi-experimental, or causal study, and it does not aim to establish cause-and-effect relationships. Its purpose is to document and analyze the pedagogical design of a course assignment and to discuss the professional competences that this assignment was intended to support.

Guiding Question

The article is guided by the following descriptive question: How was the board-game project designed and implemented in the course *Literature for Children and Youth*, and what professional competences did this activity appear to support in future primary school teachers?

Context and Participants

The activity was implemented in the compulsory course *Literature for Children and Youth* in the academic year 2024/2025. The course was attended by 100 second-year students enrolled in a primary teacher education program. Students worked in groups of four, resulting in 25 groups.

Description of the Intervention

Each group was assigned the task of designing and producing an original educational board game. The assignment was intentionally open-ended, but several basic limits were defined:

- The game had to be created entirely by the students themselves;
- The theme of the game had to support the revision or consolidation of selected aspects of literature for children and youth;
- Students could focus on a particular author, work, or genre;
- The game was to be designed in such a way that it could realistically be used in a primary classroom with first-grade pupils.

At the beginning of the project, the assignment and evaluation criteria were presented and discussed. The course instructor, together with the students, analyzed several existing educational games and prioritized aspects and features of the game that were pedagogically meaningful and attractive for young learners.

The project was carried out over several weeks of the semester. In the first session, groups were formed and each group selected a literary focus (e.g., fairy-tale motifs, contemporary Czech authors for children, literary genres). In the following sessions, students worked partly during class time and partly independently outside class:

1. In class, they brainstormed ideas, drafted game concepts, defined learning objectives in line with the curriculum, designed rules and basic mechanics, and consulted the suitability of their ideas for first-grade pupils.

2. Outside class, they prepared the final visual layout, produced the physical components of the games (boards, cards, tokens), and refined instructions so that the games would be understandable for children and usable by other teachers.

Throughout the process, the teacher acted as a facilitator, providing formative feedback on the age-appropriateness of the content, the clarity of the rules, and the feasibility of using the games in real classrooms. In the final session, each group presented its game, explained the intended learning objectives, and engaged classmates in short trial play. This was followed by a guided discussion in which students reflected on the strengths and limitations of their designs and on what they had learned about planning and evaluating didactic materials.

Sources of Reflection

The present article draws on the documented structure of the assignment, teacher observation of the design process, students' presentations of the games, and the reflective discussion conducted in the final session. Because the paper does not report systematically collected empirical data, the claims made in the article are limited to a reflective and practice-based interpretation of the activity.

Ethical Statement

The article reports on a regular course activity conducted within standard university teaching. The paper does not present personal data, individual student testimonies attributable to identified persons, or outcome claims based on formal human-subject research procedures. For this reason, the text should be read as a practice-based pedagogical account rather than as empirical human-subject research. The visual materials included in the manuscript are subject to the same copyright as this article.

AI Use Disclosure

AI tools were used only for language support and text editing. All substantive academic decisions, interpretations, and final revisions were made by the author.

Results

In this part of the article, we describe the main pedagogically relevant outcomes observed in the project and the forms of competence development that the activity appeared to support. Because this article is a practice-based reflective account, the results are not presented as statistically verified effects, but as structured observations concerning the products created and the competences exercised during the task.

Nature of the Student Products

All student groups produced an original educational board game based on selected literature for children and youth. The resulting games differed in theme, mechanics, visual design, and intended classroom use. Some focused on fairy-

tale motifs and characters, some on literary genres, and some on tasks supporting retelling, prediction, or continuation of stories.

Competences Visibly Exercised during the Project

The project required students to exercise several interrelated competences. First, students worked with curriculum transformation by selecting literary content and converting it into tasks suitable for younger pupils. Second, they engaged in didactic design by aligning learning objectives, game mechanics, instructions, and expected classroom use. Third, they used collaborative planning and communication when negotiating ideas and dividing responsibilities within groups. Fourth, they exercised creative and visual literacy through the material and graphic design of the games.

Frequently Observed Strengths

Based on the project presentations and final discussion, frequently observed strengths included students' creativity in linking literary content with playful mechanics, their willingness to experiment with non-traditional didactic materials, and their ability to produce visually engaging artefacts intended for primary school use.

Frequently Observed Challenges

At the same time, several recurring difficulties became visible. Some groups initially prioritized visual attractiveness over clearly formulated learning objectives. In some cases, the rules required further simplification to ensure usability for younger pupils. Time and material demand also influenced the final quality and feasibility of some products.

Examples of Student-Designed Games

Below we present selected games created by students of the primary teacher education program who completed the training described above.

Figure 1 shows a picture illustrating a game that takes pupils on a “journey” through different fairy-tale worlds; players move along a path and complete tasks related to characters, motifs, and settings from well-known stories. Figure 2 shows a picture of a genre-based game in which pupils classify short plot summaries or illustrations according to literary genres and justify their choices. Figure 3 presents a picture of a “reading quest” game combining movement on a board with task cards that prompt pupils to predict, retell, or creatively continue selected stories.

These examples (as shown in Figures 1 to 3) demonstrate how student teachers attempted to connect literary knowledge with playful mechanics and visual design, and how they imagined using the games to support the development of reading motivation and basic literary competences in the first years of primary school.

Figure 2

A Genre-Based Game in which Pupils Classify Short Plot Summaries or Illustrations and Justify their Choices



Figure 3

A Reading Quest Game in which Pupils Combine Movement on the Board with Task Cards Prompting for Prediction, Retelling, or Creative Story Continuation

**Discussion**

The experience described in this article suggests that university-level teacher education in the Czech Republic is gradually responding to shifting societal demands, particularly in relation to competence-based education, digitalization, and the development of soft skills. Linking national curriculum reforms with broader frameworks for digital and professional competences creates favorable conditions for such changes. At the same time, our experience indicates that accreditation requirements and fragmented course structures can make it difficult to cultivate deeper pedagogical values, intercultural sensitivity, and critical self-reflection in a coherent way. The board-game project presented here can be seen as one strategy to integrate these dimensions within a single, practice-oriented course.

The instructional activity centered on designing original board games with literary themes brought together constructivist principles, project-based learning, and the didactic transformation of content for a specific age group. Observation of students' work and their subsequent reflections suggest that the activity provided opportunities

to exercise several interrelated competences:

- Curricular and content-related competences - selecting an appropriate literary topic, formulating learning goals, and transforming them into age-appropriate tasks for first-grade pupils;
- Creativity and visual literacy - designing boards, cards, and other components in a way that supports both aesthetic appeal and clarity of use;
- Planning and evaluative skills - anticipating how the game could be introduced, played, and followed up in class, and reflecting on potential modifications after trial play.

Students' comments and engagement during the project also indicate that the activity may support motivation and emerging professional self-efficacy, which are important elements in the formation of teacher identity, as highlighted by Addleman et al. (2024). During the final discussion, several students indicated that creating their own didactic material made them feel more confident about planning lessons with children's literature and more aware of the complexity of seemingly simple classroom activities.

At the same time, the experience revealed several challenges and limitations. Some groups struggled to balance ambitious visual design with realistic time and resource constraints. Others initially focused on the attractiveness of the game at the expense of clear learning objectives or understandable rules. The reflective component, although present, was mainly based on students' self-reports and group discussions rather than on systematic data collection or classroom implementation with pupils. Thus, the activity functioned primarily as a pedagogical and reflective exercise within teacher education, not as an empirical study of learning outcomes.

The project also raises questions related to inclusion and diversity. Game-based and student-centered approaches create opportunities for differentiation, active participation, and the integration of pupils' varied experiences. In our case, some student groups spontaneously considered different levels of reading ability or the needs of shy pupils when designing their games. However, issues such as cultural responsiveness, socioeconomic diversity, and ethically grounded pedagogy were not addressed explicitly in this iteration. This points to a need to connect creative design tasks more systematically with reflection on the value-laden dimensions of education.

Conclusion and Application to Practice

The experience described in this article illustrates one possible way of aligning teacher education with contemporary social and educational demands in the Czech Republic. Within a competence-based framework, the board-game project in the course Literature for Children and Youth offered student teachers an opportunity to move beyond passive reception of theoretical content and to engage in creative, practice-oriented design work. Through the process of planning, producing, and presenting educational board games, students practiced curriculum transformation, development of teaching materials, and the design of engaging, age-appropriate learning tools. The activity also appeared to support their motivation, creativity, and reflective thinking - qualities that are important for future teaching practice.

For such innovations to have a lasting and systemic impact, they need to be embedded into teacher education curricula as regular and supported practices rather than isolated projects. This implies institutional support for pedagogical creativity, flexible course design, and opportunities for university educators to develop and share innovative teaching methods. Practice-based tasks that require student teachers to design and critically reflect on their own didactic materials - such as educational games, digital resources, or project units - can become an important component of competence-based teacher education.

Although the present account does not offer rigorously designed evidence, it contributes a practice-based perspective on how theory and practice, tradition and innovation can be combined in the preparation of primary school teachers. Further research, including qualitative and quantitative studies of student learning processes within a competency-based approach and classroom implementation, could deepen our understanding of the longer-term effects of such methods on teacher preparedness and professional identity.

In sum, the example presented here reaffirms the potential of thoughtfully designed, practice-oriented experiences to cultivate teachers who are not only knowledgeable, but also reflective, creative, and ready to respond to the complex realities of contemporary schooling.

References

- Adamec, P., & Miškelová, M. (2022). *The support of teachers' and students' digital competences in Czech-Slovak cross-border area: A particular example*. In INTED2022 Proceedings (pp. 502–507). IATED. <https://doi.org/10.21125/int-ed.2022.0196>
- Addleman, R. A., Chagalakonda, J., & Mentzer, R. (2024). “They don’t even realize they’re learning”: Enacting core practices in teacher education through board games. *Action in Teacher Education*, 47(2), 121–136. <https://doi.org/10.1080/1626620.2024.2442312>
- Botes, W. (2024). Demonstrating pedagogical content knowledge through the development of educational board games. *European Journal of STEM Education*, 9(1), 1–16. <https://doi.org/10.20897/ejsteme/14136>
- Dighliya, B. (2025). Innovative teaching methods for skill development. In M. Kayyali & B. Christiansen (Eds.), *Insights into international higher education leadership and the skills gap* (pp. 229–250). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-3443-0.ch009>
- Eguia-Gómez, J. L., Contreras-Espinosa, R. S., & Albajes, L. S. (2014). Co-creation of a serious game to develop competences on the primary education program. In 9th Iberian Conference on Information Systems and Technologies (CISTI) (pp. 1–6). IEEE. <https://doi.org/10.1109/CISTI.2014.6877080>
- Gampala, M. (2023). Innovative approaches to teaching and learning. *Recent Trends in Digital Humanities: A Focus on Language and Literature*, 12(1), 138–145. <https://doi.org/10.34293/rtdh.v12iS1-Dec.86>
- Huang, C. W., Liu, E. Z. F., Liu, L. C., & Lin, C. H. (2012). A development and evaluation of educational board game design course: An example of pre-service teacher. In IEEE Fourth International Conference on Digital Game and Intelligent Toy Enhanced Learning (pp. 99–101). IEEE. <https://doi.org/10.1109/DIG-ITEL.2012.25>
- Juliangkary, E., Suparta, I., N., Ardana, I. M., & Mahayukto, G. A. (2024). Development of learning models to enhance students’ creative thinking: A systematic literature review. *PPSDP International Journal of Education*, 3(2), 488–503. <https://doi.org/10.59175/pijed.v3i2.333>
- Kager, K., Bolli, S., Bucher, J., Kalinowski, E., & Vock, M. (2024). Lesson study – The game: Designing a game-based professional development opportunity for teachers and teacher candidates. *International Journal for Lesson and Learning Studies*, 13(5), 105–110. <https://doi.org/10.1108/IJLLS-02-2024-0043>
- Kostolányová, K., Cirus, L., Javorcik, T., & Simonova, I. (2023). A new concept of the informatics curriculum in the Czech Republic: Teacher reflection on the first year of the transition period. *Sustainability*, 15(5), 4091. <https://doi.org/10.3390/su15054091>

- Lendel, V. (2024). Peculiarities of development of social competence of students in the Czech school education. *Scientific Bulletin of Uzhhorod University*, 1(54), 92–96. <https://doi.org/10.24144/2524-0609.2024.54.92-96>
- Mavluda, K. (2024). Innovative teaching methods for developing creative competencies in vocational education students. *International Journal of Pedagogics*, 4(12), 219–223. <https://doi.org/10.37547/ijp/Volume04Issue12-46>
- Seechaliao, T. (2017). Instructional strategies to support creativity and innovation in education. *Journal of Education and Learning*, 6(4), 201–208. <https://doi.org/10.5539/jel.v6n4p201>
- Slabová, M., & Rolínek, L. (2021). Framing entrepreneurship education – Influencing factors for entrepreneurial competency learning at universities in the Czech Republic. *Advances in Social Science, Education and Humanities Research*, 141–144. <https://doi.org/10.2991/assehr.k.210513.033>