

Strengthening the key competences of second stage elementary schools pupils by deepening their regional awareness

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Grant: 7/1a/2026

Name of the grant: Developing Students' Regional Awareness Through Learning About the Local Landscape in Social Studies and Geography

Field of study: AM - Pedagogy and education

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Abstrakt The paper examines the development of cross-curricular competences among lower secondary school students through activities aimed at enhancing regional awareness. It presents a case study conducted in the Czech district of Příbram and the Slovak district of Piešťany, focusing on the assessment of quality of life in four municipalities of the local region. The educational activity integrated knowledge across subjects and promoted experiential learning. Although students' achievement levels differed (82% in the Czech sample and 70% in the Slovak sample), both groups demonstrated comparable development of key competences, particularly in communication, collaboration, and organizational skills. The findings suggest that regionally oriented education enhances geographical and critical thinking, strengthens problem-solving abilities, and fosters students' attachment to the local landscape.

Key words Cross-curricular competencies, local region, regional awareness, quality of life

1. INTRODUCTION

Human–environment relationships and people's attachment to place and landscape constitute one of the oldest and most fundamental themes in geography (Tuan, 1971, among others). Contemporary geography, as an interdisciplinary and multidisciplinary field, extends far beyond the traditional study and description of territories. Likewise, school geography has moved beyond the simple memorisation of geographical concepts and facts. Within the Slovak curriculum framework for the educational area *People and Society* (National Curriculum, 2023), geography education is increasingly oriented towards developing students' ability to understand phenomena in their spatial contexts, critically evaluate them, and apply their knowledge to solving real-world problems.

Geography teaching seeks to foster tolerance, openness to diverse perspectives and socio-cultural values, as well as the ability to ask questions and search for meaningful answers (Karvánková, 2013). At the same time, it contributes to the development of cross-curricular competences associated with life in the twenty-first century. In this context, the topic of the local landscape and quality of life represents a particularly valuable educational theme. Owing

to its multidisciplinary nature, it enables meaningful connections between geography and other school subjects and supports the implementation of integrated teaching approaches aimed at developing transferable competences across disciplinary boundaries. Furthermore, learning activities linked to the surrounding environment—an area with which students have developed a mental and emotional connection since early childhood—provide a natural and non-intrusive means of strengthening their attachment to the local region and fostering the development of regional identity (Tomčíková, 2023).

The present paper reports a case study that integrates two complementary lines of inquiry: (1) students' perceptions and evaluations of the local landscape and quality of life within it, and (2) the examination of students' practical application of competences through addressing issues and challenges directly related to their local environment. In doing so, it offers a model for incorporating these themes and approaches into the context of school geography education. Furthermore, it highlights the potential of these topics not only for strengthening students' geographical thinking but also for enhancing their regional awareness, while simultaneously fostering transferable competences and promoting the integration of knowledge across different subject areas.

2. THEORETICAL FRAMEWORK OF THE CASE STUDY

Investigating the characteristics, challenges, and potential solutions of the local region through the use of empirical evidence and contextual information represents an effective approach to fostering students' interest in their immediate environment. This process contributes to strengthening students' sense of place and their attachment to the local region. At the same time, the development of transferable competences, the promotion of interdisciplinary connections, and the integration of knowledge across subject areas serve as important mechanisms for fostering regional awareness and geographical thinking. These interrelated concepts form the theoretical foundation of the present article.

2.1 Transferable Competences and Interdisciplinary Connections

Transferable competences constitute one of the fundamental pillars of contemporary education. They bridge the gap between knowledge acquisition and its practical application. The concept of competence-based education can be traced back to the United States in the 1950s (Hodge, 2007, p. 182). In Central European educational systems, a similar concept of key competences was gradually adopted during the 1990s and became an essential component of graduate profiles designed to meet labour market demands (Blaško, 2010; Černá & Likavský, 2014).

The literature employs a variety of terms, including key, cross-curricular, transferable, transversal, and generic competences (Vančo et al., 2016). Despite differences in terminology, these concepts generally refer to an integrated set of knowledge, skills, and attitudes that enable individuals to successfully manage both professional and everyday life situations. The development of such competences is understood as a lifelong process that begins in early childhood and continues through all educational stages and school activities (DeSeCo, 2001). Janík et al. (2009) and Knecht (2010) argue that these competences transcend the boundaries of individual school subjects and possess a distinctly interdisciplinary character. Their development is considered more effective than the memorisation of isolated facts and subject-specific knowledge. Consequently, contemporary education increasingly emphasises the integration of theoretical knowledge with practical skills, collaboration, and problem-solving, thereby preparing learners to respond effectively to the complex challenges of the twenty-first century.

According to the DeSeCo framework (2001), three broad categories of key competences can be distinguished:

- the ability to use language, technology, and symbolic systems effectively and interactively;
- the ability to communicate and collaborate within socially and culturally diverse groups;
- the ability to act autonomously, responsibly, and reflectively.

In the context of school education, the Czech Framework Educational Programme (RVP, 2023, p. 10) specifies *key competences* as: learning competence, problem-solving competence, communicative competence, social and personal competence, civic competence, work competence, and digital competence. The development of these competences is not achieved in isolation within individual school subjects but rather through coordinated pedagogical strategies that integrate subject content across the curriculum, that is, through the implementation of interdisciplinary connections (Schulz et al., 2019). Key competences and interdisciplinary connections thus constitute the foundation of the contemporary constructivist model of education. Their integration into the teaching and learning process promotes learning through activities and experience, thereby stimulating students' imagination, fostering their curiosity and desire to discover, and nurturing their creativity (Savage, 2011).

2.2 The Local Landscape and Human Quality of Life

In the geographical, theoretical-methodological, and didactic literature, as well as in curriculum-related documents, two areas of ambiguity can be identified in relation to the teaching of large-scale regions.

First, ambiguity arises from the understanding and use of terminology associated with these relatively small spatial units. Within the Czech and Slovak educational context, such areas are commonly referred to as the *local landscape*, *local region*, *micro-region*, or *small region* (Frey, 1973; Kandráčková & Michaeli, 1997; Madžiková, 2002; Butola, 2023; Tomčíková, 2023, among others). Although these terms are frequently treated as synonyms, certain conceptual distinctions can be identified. Terms containing the word *region* generally refer to a spatial unit defined by administrative, natural, or functional boundaries within which interactions occur among its constituent elements. Such units may include municipalities, districts, river basins, or climatic zones. In contrast, the term *local landscape* places greater emphasis on the visible physical and cultural features of a particular place, including its appearance, character, and *genius loci*. Put simply, the distinction between a *local region* and a *local landscape* may be expressed as follows: a region concerns where a place belongs, whereas a landscape concerns what a place looks like and how it is experienced.

Second, ambiguity arises from methodological issues related to teaching the local region. Students often struggle to connect broad regional characteristics with their own everyday experiences. Consequently, one of the key challenges of local region education lies in balancing abstraction with concreteness and theoretical knowledge with lived experience. This challenge manifests itself in two main ways.

- (a) Although students are generally familiar with their immediate surroundings, they may find it difficult to understand how their municipality, neighbourhood, or district functions as part of a broader regional system. This gap between lived experience and conceptual understanding can result in fragmented or superficial geographical knowledge.
- (b) A further challenge stems from the tendency to present regions as static entities within educational practice. Such an approach overlooks the dynamic processes that shape local regions, including their historical development (Driver & Samuel, 1995), local governance and politics, migration, economic transformations, cultural interactions and interdependencies, as well as environmental issues and the quality of life of local inhabitants. As a result, students may fail to recognise the local region as a continually evolving socio-spatial system influenced by multiple interconnected factors.

Effective teaching of the local landscape is closely associated with field observation, map analysis, the use of local case studies, project-based learning, and other experiential approaches. Such methods enable students to actively explore their immediate and wider surroundings, acquire knowledge about the local area, develop a sense of familiarity with their environment, and establish meaningful connections to place. Through direct engagement with issues affecting their local communities, students can gain a deeper understanding of regional contexts, spatial relationships, and the interdependence between people and place, thereby strengthening their regional identity. Consequently, the local landscape serves as an important pedagogical tool for fostering not only spatial thinking and regional and cultural awareness, but also environmental awareness.

The concept of the local region is closely linked to quality of life, as everyday living conditions are most directly experienced and manifested at the local and micro-regional levels. The local region provides the territorial framework within which access to services, employment opportunities, social networks, and environmental conditions is shaped, all of which significantly influence both objective and subjective assessments of quality of life. At the same

time, a reciprocal relationship exists: the character of the landscape, its historical development, settlement patterns, demographic structure, socio-economic activities, as well as its *genius loci* and regional identity, contribute to individuals' sense of belonging and security. These factors represent important intangible dimensions of quality of life (Cummins, 2000). Quality of life can therefore be understood as the outcome of the interaction between spatial, social, and cultural factors that are concentrated within the local region and experienced through the everyday lives of its inhabitants (Ira & Andráško, 2007).

2.3 Geographical Thinking and Regional Awareness

A central aim of geography education is to ensure that students acquire not only a meaningful and essential body of general knowledge but also the ability to understand the world in terms of interconnected relationships and processes. Geographical thinking plays a crucial role in achieving this objective by enabling learners to interpret and make sense of the world through spatial perspectives (Karvánková, 2013). It offers a uniquely powerful framework for observing and analysing both the immediate environment and the wider world across multiple scales, from the local to the global, through the examination of physical characteristics, human activities, and the complex interactions that connect them (Jackson, 2006; Bendl et al., 2024).

Geographical thinking represents a key factor in the development of regional awareness, as it enables individuals to understand territory, spatial relationships, scale, and the interconnections between different places. Through geographical thinking, learners develop the ability to perceive landscapes and regions not merely as administratively defined units but as dynamic systems embedded within a hierarchical structure of spatial entities. The interplay between geographical thinking and regional awareness promotes a deeper understanding of one's own region while strengthening place attachment and fostering a sense of responsibility towards the environment in which individuals live. Regional awareness reflects the emotional relationship between people and a particular place and develops through the strengthening of place attachment, as well as through an understanding of its spatial patterns and historical continuity (Driver & Samuel, 1995; Nikisher, 2014).

3. RESEARCH AIMS AND OBJECTIVES

The primary aim of the study was to design an instructional resource focused on the quality of life in the local region. The resource was intended to facilitate the application of students' transferable competences, integrate geography with other school subjects, and incorporate selected cross-curricular themes defined in the Czech and Slovak national curricula. An additional objective was to direct students' attention towards the environment in which they live with their families and, in many cases, were born. Indirectly, the study also sought to foster students' interest in their local region, enhance their understanding of its characteristics, strengthen their emotional attachment to a familiar environment, and thereby deepen their regional awareness.

To achieve these objectives, a case study in the form of an instructional activity was designed and implemented. Within the activity, students assumed the role of applicants seeking employment at a District Department for Project Management and Funding. Their task was to determine which of four municipalities should receive financial support aimed at improving local quality of life. The position was to be awarded to the applicant who developed and presented the most convincing and well-founded proposal.

Students' performance was subsequently analysed using their responses recorded in the worksheet, as well as data obtained from questionnaire surveys administered to both students and the teachers who facilitated the activity.

The design of the case study was guided by a set of predefined criteria that the instructional activity was required to fulfil.

(a) The activity was anchored in a geographical area that is intrinsically familiar to the students. It focused on the district in which they live, attend school, and have their homes. The term local region, referring to the district under study, most accurately captures the spatial dimension of the case study and is therefore used throughout the remainder of the paper. Four municipalities within the local region were selected through quota sampling to ensure variation in terms of size, location, and character. Municipalities in which participating students attended school or were likely to reside were intentionally excluded. Nevertheless, students could still possess family, social, or other personal ties to these localities.

(b) Throughout the activity, students worked with authentic data relating to their local region. They engaged with real-world contexts that were familiar to them either through personal experience, travel, or indirect knowledge. The instructional tasks were based on the results of questionnaire surveys and interviews conducted with randomly selected residents of the four municipalities. The purpose of this prior research was to investigate local residents' perceptions of quality of life in their respective communities.

(c) The participants were ninth-grade students from selected lower secondary schools. At this stage of schooling, students are assumed to possess the broadest range of subject-specific knowledge, skills, and learning experiences acquired throughout compulsory education. They have already developed a variety of cognitive and procedural strategies and are therefore capable of integrating knowledge from different disciplines when addressing more complex educational tasks that transcend traditional subject boundaries. Such activities may consequently be regarded as an effective means of fostering transferable competences (Knecht, 2010).

(d) A further objective of the activity was to stimulate students' ability to apply transferable competences, with particular emphasis on problem-solving competence. The study did not seek to examine the full spectrum of transferable competences, as this domain encompasses a broad and heterogeneous range of knowledge, skills, and dispositions. Instead, students were required to understand a real-world problem associated with everyday life in the local region, conceptualise and represent the problem, propose and evaluate potential solutions, and critically compare their proposals with alternative approaches. These tasks were framed within the context of assessing the quality of life in selected municipalities. The activity thus reflected the principles of learning through activity and experience (Knecht, 2010; Savage, 2011).

(e) Finally, the activity was designed to encourage the use of geographical thinking, spatial reasoning, and the ability to identify relationships and interconnections. Through each stage of the learning process, students were encouraged to develop a stronger sense of belonging to the local landscape and region, thereby fostering the development of regional awareness.

4. RESEARCH METHODOLOGY

The investigation of students' problem-solving competence within an instructional activity focused on evaluating quality of life in the local region was conducted in two stages. The first stage took place in 2017 in the Czech district of Příbram as a pilot study, followed three years later by the second stage in 2020 in the Slovak district of Piešťany. In the Příbram district, the study involved two ninth-grade

classes from ZŠ pod Svatou Horou in the town of Příbram, comprising a total of 28 students (39% boys and 61% girls). In the Piešťany district, the activity was implemented in two schools located in municipalities with the highest and lowest populations among those containing lower secondary schools (ZŠ Drahovce and ZŠ Rakovice), as well as in one urban school, ZŠ Brezová in Piešťany. Altogether, 54 students from three ninth-grade classes participated in the activity (61% boys and 39% girls).

A qualitative research design incorporating selected quantitative elements was adopted. The instructional activity was implemented in several phases: (1) an introductory phase in which the teacher facilitated a discussion of key concepts and introduced the activity to students; (2) the main phase, during which students completed the assigned tasks; (3) a questionnaire survey administered to students immediately following the activity; (4) a questionnaire-based evaluation of the activity completed by participating teachers; and (5) a questionnaire survey examining teachers' views and experiences regarding the use of instructional activities and methods aimed at fostering transferable competences and interdisciplinary connections in their teaching practice. The fifth phase is not analysed in the present paper. The first three phases were completed within a single lesson.

4.1 Teacher Guidelines

The teacher was provided with detailed guidelines on how to facilitate students' work throughout the activity. During the first 10 minutes of the lesson, the teacher employed brainstorming as an introductory method to clarify key concepts associated with the activity. The teacher then introduced the topic and the local region under investigation, explained the task requirements, and familiarised students with the instructional materials, resources, and terminology relevant to the activity (e.g., quality of life and its determinants, project management department, funding schemes). The organisational structure and timing of the activity were also outlined.

Students were subsequently organised into groups of three to four members. The teacher specified the time allocated to each phase of the activity by displaying the schedule on the board: 15 minutes for group work, 15 minutes for individual work, and 5 minutes for completion of the questionnaire. The exact deadline for submitting all completed materials was also communicated to the students.

4.2 Implementation of the Instructional Activity

The instructional activity was designed to be engaging, unconventional, and motivating for students. Particular emphasis was placed on capturing students' interest by confronting them with information related to a geographical area that was familiar and personally relevant to them. Students worked with two instructional materials:

(a) Worksheet (Figure 1) – designed to investigate students' problem-solving competences. Within the activity, students assumed the role of employees of the District Department for Project Management and Funding. Their task was to decide which of four municipalities within their local region should receive financial support aimed at improving the quality of life of its residents.

(b) Supplementary Material to the Worksheet (Figure 2) – consisting of a district map displaying the settlement structure (location and size of municipalities) and transport network, together with statements provided by residents of the four municipalities. These statements represented a combination of personal views and

experiences regarding quality of life in the respective communities. Based on this information, students were required to determine which municipality should receive funding intended to improve local living conditions. Without these contextual data, the task could not have been completed.

The instructional activity combined both individual and collaborative learning. Group work was incorporated primarily due to the limited time available within a single lesson. A further reason was that collaborative work enabled the observation of additional student competences, including civic, social and personal, and communication competences. During the group-work phase, students discussed local issues and jointly proposed potential solutions to the problems identified in the selected municipalities. This was followed by an individual work phase, during which each student recorded their own proposal and provided a justification for allocating funding to one of the municipalities in the worksheet.

4.3 Student Questionnaire

Upon completion of the instructional activity, students were asked to complete the *Student Questionnaire on Problem-Solving Competences*, which was printed on the reverse side of the worksheet. The questionnaire was based on students' self-assessment and consisted of four thematic sections.

The first section focused on students' subjective evaluation of their success or difficulties in completing the activity. The second examined students' perceptions of the materials and information provided to support task completion. The third section explored the extent to which students drew upon knowledge acquired in other school subjects when solving the tasks, thereby addressing the cross-curricular dimension of the activity. Finally, the fourth section focused on students' evaluation of the collaborative work process and their experiences of working in groups.

The questionnaire was designed to provide insight into students' perceptions of their own learning processes, their use of transferable competences, and the contribution of interdisciplinary knowledge and collaborative learning to problem-solving in a geographically grounded educational context.

4.4 Teacher Evaluation of the Instructional Activity

Students' *problem-solving competence* was assessed primarily through the analysis of the worksheet, which served as the main evaluation instrument. Assessment was conducted across three dimensions. The first concerned students' ability to identify, understand, and adequately describe the most significant issues affecting quality of life in the municipality. The second focused on the quality of the proposed solution, with particular attention paid to its realism, logical coherence, and practical feasibility. The third dimension examined students' ability to justify their proposed solutions through reasoned argumentation and to reflect on their potential consequences.

Although the study focused primarily on problem-solving competence, no competence can be developed or assessed in isolation. Consequently, several additional competences were observed throughout the activity. During discussions and collaborative work, particular attention was paid to communication competences. Group work also provided opportunities to observe students' interactions, willingness to cooperate, and ability to work effectively with others, thereby allowing aspects of social competence to be evaluated. During the individual work phase and

completion of the worksheet, work-related competences, such as time management, creativity, and independent task completion, were also assessed.

Communication competence was evaluated on the basis of the logical coherence and meaningfulness of students' written responses in the worksheet, as well as their overall ability to communicate during group work, as observed by the teachers. *Civic competence* was assessed through students' ability to formulate and defend arguments both within group discussions and in their written responses. Students' responses to the questionnaire also provided evidence of *social and personal competences*, particularly their capacity for self-reflection and reflection on the performance of their group. *Work-related competence* was evaluated according to students' ability to manage the allocated time effectively, organise their work, and estimate the time required to complete the assigned tasks.

Through their responses to the teacher questionnaire, teachers evaluated not only students' competences but also the overall implementation of the activity. Similar to the student questionnaire, teachers were invited to provide their personal views regarding students' success in completing the task, the adequacy of the time allocated, and the extent to which the amount and complexity of the information provided were appropriate for students to process and interpret.

5. DISCUSSION OF THE FINDINGS ON TRANSFERABLE COMPETENCES

The findings confirmed that the majority of students demonstrated an age-appropriate level of development of the transferable competences under investigation. This was evidenced by the analysis of the case study activity. During the introductory brainstorming session, students were generally able to explain the concept of a subsidy. In contrast, the concept of quality of life proved more challenging at the outset. Following classroom discussion, students began to associate quality of life with factors such as income, material well-being, health, environmental quality, traffic emissions, and green spaces. Students associated quality of life with concepts such as lifestyle, living standards, and financial well-being, as well as with environmental factors including traffic congestion and air pollution.

All students in the sample understood the task requirements and were able to work effectively with both the worksheet and the accompanying materials. They successfully identified local problems, and most were able to propose solutions and justify their decisions adequately. Student motivation may have been enhanced by the prospect of receiving the highest grade for the most successful solution, symbolically rewarded by the fictional position within the District Department for Project Management and Funding. For some participants, motivation also stemmed from personal familiarity with the selected municipalities; several students either knew the localities well or originated from them. Six students from the Czech sample (more than one-fifth of participants) and eight students from the Slovak sample (15%) produced particularly creative solutions that exceeded the quality of most other submissions. Their proposals were logical, realistic, well-structured, and innovative. For example, one student suggested using the funding in the municipality of Šípkové to purchase a community minibus that would transport elderly residents to shops and healthcare facilities in the district town on designated days while also serving neighbouring municipalities along the route. Approximately one quarter of students completed the activity at an insufficient level (18% of students in the Czech sample and 30% in

the Slovak sample). Although these students were generally able to identify existing problems—for example, the absence of healthcare services, retail facilities, or public transport connections—they often failed to propose meaningful and feasible solutions or were unable to justify their proposals adequately. Their responses were typically limited to general statements such as “build shops”, “establish a doctor's office”, or “create a bus stop”.

Within the Slovak sample, students' performance was also examined in relation to their most recent geography grades. On average, students with higher grades achieved better results in the activity. However, both across the entire sample and within individual schools, excellent achievement in geography (grades 1 and 2) did not automatically translate into the highest levels of success in the activity. This pattern was particularly evident among students with the highest grade in geography, who represented approximately one quarter of all participants. While most of the highest-quality solutions were produced by students with grade 1 in geography, only 15% of all students achieved the “very good” level of performance. The analysis further revealed gender differences in achievement, with girls outperforming boys by approximately 24%. Girls demonstrated higher levels of success than boys even when comparisons were made among students with equivalent geography grades. One possible explanation for this difference does not appear to be a lower level of competence among boys but rather lower engagement with the activity. Several boys explicitly stated that the most difficult aspects of the task were “thinking” about the problem and “doing the work” itself.

5.1 Students' Performance in the Instructional Activity

The overall success rate of Czech students in completing the instructional task was 82%. Of these, 21% achieved the highest evaluation category, *Very Good*, while 61% were assessed as *Average*. Conversely, 18% of students failed to complete the task successfully and received the evaluation *Insufficient*. In Slovakia, the task was successfully completed by 70% of students, representing a success rate 12 percentage points lower than that observed among Czech students. Slovak students achieved lower results than their Czech counterparts in both of the highest evaluation categories, with differences of 6 percentage points in each case. Specifically, 15% of Slovak students attained the *Very Good* evaluation, while 55% were assessed as *Average*. The proportion of students receiving the evaluation *Insufficient* reached 30% of the Slovak sample.

Although Czech students achieved a higher overall success rate, both groups demonstrated a comparable level of competence application during the activity. In certain aspects, Slovak students outperformed their Czech peers, particularly in their ability to navigate and interpret the information and supporting materials provided. Furthermore, Slovak students demonstrated a higher degree of task allocation and role distribution within their groups during collaborative work. However, these strengths were not reflected in higher overall levels of task performance or final achievement.

5.2 Assessment of Problem-Solving Competence

Students' success in completing the instructional task formed an integral part of the assessment of problem-solving competence. According to students' responses, 29% of Czech participants experienced difficulties in navigating the information and supporting materials provided. In contrast, only 7.4% of Slovak students reported similar difficulties. Furthermore, 71% of Czech

students indicated that the information contained in the supplementary materials was sufficient for successful task completion and that no additional information was required. Among Slovak students, satisfaction with the amount of information provided was even higher, reaching 80%.

In the Czech sample, six students indicated that they would have benefited from additional information. Three of them expressed a need for more detailed information regarding public transport connections, while the remaining three would have welcomed a larger number of responses from local residents. As potential sources of such information, two students identified the internet, whereas four students stated that they would have obtained the information through interviews with local inhabitants.

Within the Slovak sample, eleven students reported a need for additional information. Similar to the Czech respondents, three students suggested that a larger number of residents' statements would have been helpful, while two students indicated that information regarding the amount of available funding was missing. The remaining six students did not specify what additional information they would have required. When asked how they would obtain the missing information, most respondents referred to internet sources (five students), while six students stated that they would visit the municipality in person and seek information directly from local residents through interviews.

These findings suggest that the majority of students were able to work effectively with the information provided and demonstrated an ability to identify additional sources of information when required. At the same time, the responses indicate an awareness of the importance of both digital resources and direct engagement with local communities when addressing real-world problems in a geographical context.

5.3. Assessment of Communication Competence

Students demonstrated age-appropriate communication skills during group discussions and collaborative work. A similar level of verbal communication was observed among Slovak students. However, the assessment of written communication revealed some differences between the two samples.

In the Czech sample, 18% of students were unable to adequately justify their opinions and decisions. The corresponding proportion in the Slovak sample was 30%. Conversely, 21% of Czech students demonstrated a very high level of communication competence by effectively defending their viewpoints and supporting them with creative arguments. Among Slovak students, this level of performance was achieved by 15% of participants. The remaining responses were assessed as average, accounting for 61% of the Czech sample and 55% of the Slovak sample.

5.4 Assessment of Civic Competence

A comparison of the Czech and Slovak findings indicates a broadly similar level of civic competence in both groups. Most students actively participated in group work and classroom discussions. When presenting proposals and counterarguments, students demonstrated the ability not only to listen to and respect the opinions of others but also to engage collaboratively in the search for solutions that would serve the common good. These findings suggest that the activity provided opportunities for the development and application of civic competences associated with participation, cooperation, and responsible decision-making.

5.5 Assessment of Social and Personal Competences

Students' responses to the questionnaire, including several critical and self-critical comments, indicated a capacity for both reflection and self-reflection. Their evaluations of the outcomes and processes of group work demonstrated an ability to assess not only their own contributions but also the performance of their peers. The findings therefore suggest that students were capable of critically reflecting on their learning experiences, recognising strengths and weaknesses in collaborative work, and expressing informed opinions regarding both individual and group performance.

5.6 Assessment of Work-Related Competences

The evaluation of both studies confirmed that all participating students were able to manage the time allocated to the activity effectively and organise their work in a manner that allowed them to complete and submit the assigned tasks within the prescribed time limit. Teacher observations indicated, however, that the overall level of collaboration among students was relatively limited. During the group-work phase, students initially tended to examine the provided materials individually. Meaningful discussion generally emerged only during the latter half of the allocated time. Only a minority of groups divided the tasks among members as part of their collaborative work, and in some groups, little or no cooperation was observed.

According to students' responses, only 18% of Czech participants distributed tasks among group members and worked on designated parts of the assignment. Consequently, many groups did not fully utilise the potential benefits of collaboration, including more efficient use of time and opportunities for deeper discussion. Among Slovak students, 28% reported dividing tasks within their groups, representing a proportion 10 percentage points higher than that observed in the Czech sample. These findings suggest that Slovak students demonstrated a higher degree of cooperation, work organisation, and planning. However, this advantage was not reflected in higher overall performance outcomes (see Section 5.1).

5.7 Evaluation of Group Work by Teachers and Students

Students' evaluations of group work were remarkably similar in both countries. A majority of respondents considered collaborative work beneficial and believed that it contributed to successful task completion, including 71% of Czech students and 69% of Slovak students. Negative evaluations were likewise comparable, with 25% of Czech students and 24% of Slovak students reporting that group work did not assist them in solving the tasks. The remaining respondents were unable to express a clear opinion on the contribution of collaborative work to their performance.

These findings suggest that students generally perceived collaborative learning as a valuable component of the activity, despite the relatively limited level of cooperation observed by teachers during the implementation process. Students' responses in both studies revealed a tendency to evaluate their own contribution to group work positively. In the Czech sample, 89% of students believed that they had contributed a valuable solution to the task, while 75% reported that other members of their group had also proposed useful ideas. Similarly, 83% of Slovak students considered their own contribution to be beneficial, and 78% were convinced that the most effective solution had originated from within their group.

Particularly noteworthy were students' responses concerning participation in group discussions. A total of 14% of Czech students and 18% of Slovak students acknowledged that they had not actively participated in discussions or reported that no substantive discussion had taken place within their group. These findings suggest that although students generally perceived their own contributions positively, the quality and intensity of collaborative interaction varied considerably across groups.

5.8 Students' and Teachers' Evaluation of the Cross-Curricular Nature of the Instructional Activity

Analysis of the responses revealed substantial, yet expected, differences between students' and teachers' perceptions of the cross-curricular character of the instructional activity. Students themselves were often unaware of the extent to which the activity required the integration of knowledge from different subject areas. This was evident in approximately half of the Czech and Slovak student sample. Conversely, nearly one-fifth of students reported that they had consciously drawn upon knowledge and skills acquired in other school subjects when completing the task. Most of these students identified links with civic education, from which they had acquired an understanding of concepts such as subsidies (four students) and developed empathy-related skills (three students). One student referred to the application of basic financial literacy acquired in civic education lessons. Other students mentioned mathematics, particularly in relation to measuring distances on maps, and language education, specifically reading literacy skills developed in Slovak language classes. Approximately one-third of Slovak students and one-quarter of Czech students recognised connections between the activity and other subjects. However, despite acknowledging these links, they stated that they had not consciously applied any specific knowledge or skills from other disciplines while solving the tasks.

Teachers, in contrast, perceived the activity as having a considerably broader interdisciplinary dimension. More than half of the teachers in both the Czech and Slovak samples believed that students were required to draw upon knowledge and competences acquired in other subjects, particularly civic education and cross-curricular themes. They highlighted concepts such as subsidies, investment, and budgeting, as well as skills related to information analysis, logical reasoning, and argumentation. Teachers also emphasised the application of economic, financial, and civic literacy, which they considered integral to successful completion of the activity.

These findings suggest a discrepancy between students' and teachers' perceptions of interdisciplinary learning. While students tended to focus on the immediate task requirements, teachers were more likely to recognise the broader range of knowledge, skills, and competences embedded within the activity.

6. CONCLUSION

Contemporary geography education has moved beyond the traditional transmissive model based primarily on the memorisation of factual knowledge. Current curriculum frameworks in both the Czech Republic and Slovakia (RVP ZV; ŠVP) emphasise a competence-based approach, critical thinking, problem-solving abilities, and the meaningful integration of knowledge across subject areas. Within this framework, geography plays an important role in fostering students' spatial literacy and global competence. Topics with strong interdisciplinary potential, such as quality of life, provide opportunities to integrate natural, social, and environmental dimensions of learning.

As the immediate environment of students' everyday lives, the local landscape plays a crucial role not only in their cognitive and emotional development (Kühnlová, 1985; Madziková, 2002; Tomčíková & Čieľ, 2024), but also in the formation of personal characteristics, value orientations, and regional awareness. Geography education has traditionally created opportunities for students to explore their immediate surroundings; however, contemporary educational approaches increasingly promote a deeper understanding of sense of place, landscape perception, and students' attachment to their region. Influenced by the socio-cultural turn of the late twentieth century, behavioural and humanistic geography introduced concepts such as place identity, regional identity, and place attachment into geographical thinking. These concepts emphasise the emotional bonds between people and places while simultaneously offering new opportunities for educational practice (Chromý & Janů, 2003; Matlovič, 2010; Tuan, 2012).

The pilot study conducted in the Příbram district of the Czech Republic demonstrated the potential of this topic for the development of students' competences. At the same time, it provided a basis for comparison with research subsequently carried out in Slovak lower secondary schools in the Piešťany district. The empirical investigation of students' regional awareness and perceptions of the local landscape presented in this paper, together with the case-study-based instructional activities and their outcomes, may contribute to ongoing discussions concerning the more effective integration of geographical concepts into educational practice. Such an approach has the potential to foster students' personal, civic, geographical, and environmental literacy while promoting an understanding of sustainable landscape development.

Furthermore, the study offers insight into the extent to which students identify with their region, how they interpret quality of life within their local environment, and which mental constructs and value preferences shape their spatial perceptions. These aspects are important not only for learning processes but also for understanding the broader social and cultural relationships, as well as forms of civic engagement, that influence the development of children's regional identity and regional awareness.

Resources

1. BENDL, T. et al. Geographical thinking in geography education: a systematic review. *International Research in Geographical and Environmental Education*. 2025, 34(4), 326–352. <https://doi.org/10.1080/10382046.2024.2354097>
2. BLÁŠKO, M. Úvod do modernej didaktiky I [*Introduction to Modern Didactics I*]. Košice: KIP TU, 2010. 286 p. ISBN 978-80-553-0466-3. <http://web.tuke.sk/kip/main.php?om=1300&res=low&menu=1310>
3. CUMMINS, R. A. Objective and subjective quality of life scale: an interactive model. *Social Indicators Research*. 2000, 52, 55–72.
4. ČERNÁ, J., LIKAVSKÝ, P. Kľúčové kompetencie v geografickom vzdelávaní a možnosti ich rozvíjania [*Key Competences in Geography Education and Opportunities for Their Development*]. Geografia. 2014, 22(2), 55–59. <http://www.casopisgeografia.sk/index.php/Geografia/issue/view/Issue/5/139>
5. DESECO. *Definition and selection of key competencies*. Göttingen: Hogrefe & Huber Publishers, 2001. 251 p. ISBN 0-88937-248-9. https://www.deseco.ch/Defining_and_selecting_key_competencies_2001.pdf
6. DRIVER, F., SAMUEL, R. Rethinking the Idea of Place. *History Workshop Journal*. 1995, 39, v–vii. <http://www.jstor.org/stable/4289347>

7. FREY, A. E. The teaching of regional geography. *Geography*. 1973, 58, 119–128. <https://www.jstor.org/stable/40567972>
8. HODGE, S. The origins of competency-based training. *Australian Journal of Adult Learning*. 2007, 47(2), 179–209. <https://files.eric.ed.gov/fulltext/EJ797578.pdf>
9. CHROMÝ, P.; JANŮ, H. Regional identity, activation of territorial communities and the potential of the development of peripheral regions. *AUC Geographica*. 2003, 38(1), 105–117.
10. IRA, V., ANDRÁŠKO, I. Kvalita života z pohľadu humánnej geografie [Quality of life from the perspective of human geography]. *Geografický časopis*. 2007, 59(2), 159–179. <https://doi.org/10.1080/00167487.2006.12094167>
11. JACKSON, P. Thinking geographically. *Geography*. 2006, 91(3), 199–204. <https://doi.org/10.1080/00167487.2006.12094167>
12. JANÍK, T. et al. Možnosti rozvíjení didaktických znalostí obsahu u budoucích učitelů [Possibilities for developing pedagogical content knowledge in pre-service teachers]. Brno: Paido, 2009. 148 p. ISBN 978-80-7315-176-8. <https://www.p.ed.muni.cz/weduresearch/publikace/pvtp14.pdf>
13. KANDRÁČOVÁ, V., MICHAELI, E. Mikrogeografia v edukácii, výskume a pre prax [Microgeography in Education, Research, and Practice]. In: HARCÁR, J., ed. *Krajina východného Slovenska v odborných a vedeckých prácach*. Prešov: SGS, 1997, 265–285. ISBN 80-88885-10-8.
14. KARVÁNKOVÁ, P. Vývoj didaktiky geografie a nové trendy výuky zeměpisu v Česku [The development of geography didactics and new trends in geography education in the Czech Republic]. *Annales Universitatis Paedagogicae Cracoviensis Studia Geographica*. 2013, 148(4), 101–109. <https://Annalesgeo.uken.krakow.pl/article/view/1523>
15. KARVÁNKOVÁ, P., POPIAKOVÁ, D., SLEPIČKOVÁ, M. (2019): The topic of quality of life and key competencies development: a case study about supporting the geographical thinking of pupils. *Acta Universitatis Palackianae Olomucensis – Geographica*. 2019, 48(1–2), 41–60 <https://geography.upol.cz/geographica-48-1c>
16. KNECHT, P. et al. Příležitosti k rozvíjení kompetence k řešení problémů ve výuce na základních školách [Opportunities for developing problem-solving competence in primary school teaching]. *Orbis scholae*. 2010, 4(3), 37–62. https://karolinum.cz/data/clanek/5256/OS_4_3_0037.pdf
17. KÜHNLOVÁ, H. Geografia miestnej oblasti [Geography of the Local Area]. In: MACHYČEK, J., KÜHNLOVÁ, H.; PAPÍK, M. *Základy didaktiky geografie*. Bratislava: SPN, 1985, 317–320.
18. MADZIKOVÁ, A. Geografia miestneho regiónu vo svetle empirického štúdia [The geography of the local region in the light of empirical research]. *Folia Geographica*. 2002, 6, 297–309. <https://www.foliageographica.sk/wp-content/uploads/2025/03/32-Geografia-miestneho-regionu-vo-svetle-empirickeho-studia.pdf>
19. MATLOVIČ, R. Teória regiónov a regionalizácie [Theory of regions and regionalisation]. In: MICHAELI, E., MATLOVIČ, R., IŠTOK, R. et al. *Regionálny rozvoj pre geografov*. Prešov: PU, 2010, 25–89. ISBN 978-80-555-0065-2.
20. NIKISHER, R. Regionálne povedomie a identita regiónov na Slovensku [Regional awareness and the identity of regions in Slovakia]. *Geografické informácie*. 2014, 18(1), 151–161. <https://www.kggr.fpvai.ukf.sk/96>
21. RVP – Rámcový vzdelávací program pro základní vzdělávání [Framework educational programme for basic education]. Praha: MŠMT, 164 p. https://www.edu.cz/wp-content/uploads/2023/07/RVP_ZV_2023_cista_verze.pdf
22. SAVAGE, J. *Cross-curricular teaching and learning in the secondary school*. London: Routledge, 2011. 201 p. https://staibabussalamsula.ac.id/wp-content/uploads/2024/01/CROSS-CURRICULAR-TEACHING-AND-LEARNING-staibabussalamsula.ac.id_.pdf
23. SCHULZ, G. et al. *Issues in interdisciplinary studies*. Middletown: Alliance Printing, 2019, 37(2), 196 p. https://escholarship.org/content/qt1gv0z94j/qt1gv0z94j_noSplash_b4d68a11652656a98663cc5a2f88cf64.pdf?t=s1nvtb
24. ŠVP – Štátny vzdelávací program pre základné vzdelávanie 2023 [National Curriculum for Primary Education 2023]. Vzdelávacia oblasť Človek a spoločnosť. https://www.minedu.sk/data/files/11816_clovek-a-spolocnost
25. TOMČÍKOVÁ, I. Vnímanie pojmov miestna krajina a miestny región žiakmi základných škôl [Primary school students' perceptions of the concepts of the local landscape and the local region]. *Geografické štúdie*. 2023, 16, 58–69. <https://www.fpv.u mb.sk/app/cmsFile.php?disposition=i&ID=21547>
26. TOMČÍKOVÁ, I., ČIEF, R. Miestna krajina a geografická kognitívna konštrukcia [The local landscape and geographical cognitive construction]. *Arnica*. 2024, 14(1–2), 8–15. https://www.arnica.zcu.cz/images/2024_clanky/Arnika_2024_1-2_2-TomcikovaCief-web.pdf
27. TUAN, Y. F. *Man and nature*. Washington: Association of American Geographers, 1971. 49 s. (Resource Paper No. 10.)
28. TUAN, Y. F. *Humanist Geography: An Individual's Search for Meaning*. Staunton, VA: George F. Thompson Publishing, 2012. 181 p. ISBN 978-0-9834978-1-3.
29. VANČO, M. et al. Analýza získavania prierezových kompetencií na slovenských vysokých školách [Analysis of the acquisition of transferable competences at Slovak universities]. Bratislava: MŠVVaŠ SR, 2016. 46 p. <https://www.minedu.sk/data/att/02e/10091.63ce2d.pdf>