



FOSTERING INCLUSION AND SKILL DEVELOPMENT IN CHILDCARE INSTITUTIONS: LESSONS FROM THE VISEGRAD REGION

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Abstract

Children growing up in residential childcare often face restricted access to areas that are essential for their future. These include inclusive education, inspiring cultural experiences and, importantly, the benefits of emerging educational technologies. This study draws on long-term research in children's homes and an international project supported by the Visegrad Fund, which created a framework for exploring innovative educational approaches. The aim was to identify and verify methods that can promote personal growth, social inclusion, and readiness for the digital era among children in residential childcare. Using a participatory action research approach with a qualitative design, the study involved children and educators from several Czech and Slovak children's homes and a Ukrainian children's home evacuated to Poland. Over three months, local educational activities were implemented alongside an international meeting centred on an inclusive sports programme and two parallel workshops. The analysis of the results, in the context of ongoing research, showed that combining cultural, sports, and educational activities enhanced collaboration, communication, self-expression, and interest in learning. Modern technologies played a key role, with artificial intelligence tools supporting project implementation and increasing inclusivity and personalisation in teaching. The study recommends integrating modern technologies into non-formal education in residential childcare while ensuring ethical and cultural sensitivity in the adoption of new educational approaches.

Keywords: residential childcare, inclusive education, participatory action research, social inclusion

Introduction

Children growing up in residential childcare are widely regarded as one of the most vulnerable groups in contemporary society. Their life histories often contain adverse experiences, repeated family disruption, and long-term exposure to environments that may be described as unstable or dysfunctional (Alfandari & Taylor, 2023; Brend et al., 2025; Daněk, 2024). Although they come from varied cultural and social backgrounds, specific challenges recur. Many experience social exclusion, continue to face persistent educational gaps, and have limited opportunities to engage in cultural or civic life (Bach-Mortensen et al., 2022; Sindi, 2022). Reform initiatives have been introduced repeatedly, yet persistent educational inequalities continue to mark the region of Central and Eastern Europe. Educational interventions in these settings too often appear poorly tailored to individual needs, insufficiently integrate digital tools, and fail to nurture key twenty-first-century competencies, which in turn affects children's emotional, cognitive, and social growth (Izzo et al., 2022; Kendrick, 2015).

The educational and social pathways of children in residential childcare rarely develop in a linear fashion. Interruptions in schooling, combined with insufficient support networks and weak coordination between residential childcare staff and schools, often complicate their progress (Chinn et al., 2021). These difficulties are compounded by uneven access to educational

resources and digital technologies. Where such access is limited, opportunities to build digital skills and learning competences are curtailed, increasing the risk that existing inequalities will be reinforced rather than reduced (UNICEF, 2023).

Residential childcare does not exist in isolation from broader societal shifts. Rapid technological change and the growing role of artificial intelligence in education create both opportunities and new dilemmas. Modern technological systems may allow for personalised learning pathways, adaptive assessment, and more effective support for the competencies expected in the twenty-first century (Luckin & Cukurova, 2019; Vieriu & Petrea, 2025). Yet their use also raises questions that cannot be ignored: data protection, equitable access across different socio-economic groups, and sensitivity to cultural diversity (Mainzer & Kahle, 2024; Stárek, 2025).

Research on residential childcare has expanded in recent decades, but the focus has leaned heavily toward social work and child protection law. Pedagogical inquiry remains comparatively less developed. Calls to redefine residential childcare through an explicitly educational lens have been voiced for some time, but with limited uptake in practice (Whittaker, 2024). Newer contributions, such as Equit's (2024) analysis of participation, highlight the importance of children's voices, yet often frame them primarily in institutional or legal contexts. Comparative work by James et al. (2022) and Szafranek et al. (2022) illustrates how national childcare systems differ, reflecting distinct traditions and cultural assumptions. Other studies have turned attention to structural change, such as the privatisation of residential childcare in Nordic countries (Shanks et al., 2021) or governance reforms in Spain (Bravo et al., 2022).

What is less visible, however, is a sustained pedagogical perspective that foregrounds inclusive education, competence development, and the everyday role of learning in the lives of children in residential childcare. The present study seeks to address that gap. It examines how educational, cultural, and sporting activities, when supported by digital tools and emerging technologies such as AI, may contribute to children's holistic development. By situating residential childcare within a pedagogical framework, the study aims to complement the existing body of literature and to open new avenues for inclusive educational practice.

Research Problem

There is currently a significant lack of systematic and methodologically rigorous research that examines innovative educational approaches specifically adapted to the context of residential childcare. While previous studies have addressed social work and institutional frameworks, the pedagogical dimension remains underdeveloped. In particular, approaches that integrate cultural, sporting, and educational activities have not been sufficiently conceptualised or empirically evaluated as tools for fostering inclusion and competence development in this setting.

The present study responds to this gap by exploring how such interventions can be meaningfully connected with emerging technologies, especially artificial intelligence (AI). AI has increasingly been discussed as a transformative instrument in education, yet its use as a supportive pedagogical tool in residential childcare has remained largely unexplored. This neglect is striking, given the evolving needs of children with residential childcare experience and the growing demand for inclusive, future-oriented educational frameworks (Calheiros & Patrício, 2014; Daněk et al., 2023).

National systems of residential childcare are shaped by distinctive policy traditions and cultural contexts (Daněk et al., 2024), which have resulted in significant cross-country differences. Nevertheless, transnational cooperation, particularly within networks such as FICE Czech Republic and FICE International, has enabled the identification of thematic areas with broader international relevance. Against this backdrop, the present study is positioned as

both a pedagogical and comparative contribution to ongoing international debates about how residential childcare can better address twenty-first-century educational needs.

Research Focus

This study explores how educational opportunities within residential childcare may be expanded by integrating cultural, sporting, and educational activities. Particular attention is given to the potential role of artificial intelligence, not as a replacement for human educators but as a set of tools that might help create adaptive learning materials, support professionals in their daily work, and personalise learning processes in ways that reflect the diverse needs and backgrounds of children.

The research builds on long-term examination of educational processes in children's homes and utilises a cross-border initiative funded by the Visegrad Fund as a model case for testing innovative approaches. This initiative involved direct cooperation between institutions in the Czech Republic and Slovakia, as well as a unique group from a Ukrainian children's home that had been evacuated to Poland due to the war. The combination of these contexts provided a distinctive opportunity to test both the adaptability and the transnational relevance of the proposed educational approaches.

Research Aim

The study aimed to identify and critically examine educational approaches that supported personal development, social inclusion, and the cultivation of digital literacy among children in residential childcare. Artificial intelligence was considered within a broader framework that combined cultural, sporting, and educational activities. Rather than presenting AI as a universal solution, the analysis sought to show how such tools might be integrated in practice and how they could contribute to inclusive methods of non-formal education. The intention was to generate empirically grounded insights that might guide the wider adoption of approaches sensitive to the specific needs of these settings.

Research Questions

In line with the research problem, focus, and aim, the following research questions have been formulated:

1. What educational opportunities arise from integrating cultural, sports, and educational activities within residential childcare?
2. What role can AI play in supporting inclusive and adaptive education in residential childcare settings?
3. How can these approaches be effectively implemented across different cultural and institutional contexts, particularly within the Visegrad Group countries?

Research Methodology

General Background

This study builds on a body of research concerned with the education and development of children in residential childcare. These children continue to encounter restricted access to individualised learning, limited exposure to modern technologies, and only occasional opportunities to take part in stimulating cultural or sporting activities. Previous scholarship

has therefore attempted to identify methods that might compensate for such deficits and better prepare young people for participation in a digital and increasingly interconnected society.

The present study draws on an international project supported by the Visegrad Fund, which was used as a model case for experimenting with new approaches. The project created a structured setting where cultural, sporting, and educational components could be combined, while at the same time testing how artificial intelligence might contribute to this integration. Over a three-month period, activities were carried out within residential childcare institutions and concluded with an international meeting that provided a setting to assess both functionality and transferability in an intercultural context.

This research stands at the intersection of two lines of inquiry: the long-term study of education in residential childcare and the more focused exploration of cultural, sporting, and educational practices that may open new possibilities. Within this setting, attention is also given to the pedagogical potential of artificial intelligence. The framework adopted here not only seeks to identify educational opportunities but also to establish a methodological basis that could inform subsequent studies and professional practice.

To pursue these aims, the study moved away from quantitative measurement and employed a qualitative design. Sustained engagement with the target population made Participatory Action Research (PAR) an appropriate choice. This approach allowed children, educators, and professionals to take an active role in shaping the activities and reflecting on their outcomes, thereby embedding participation into the research process itself.

Context

The study was embedded within the international project Sport, Culture, and Education: Empowering Visegrad's Children for a Brighter Future, supported by the Visegrad Fund. The primary fieldwork was conducted in June 2025 in Zlín, Czech Republic, during a flagship event known as the Visegrad Unity Games. This initiative was designed to promote social inclusion, intercultural dialogue, and participatory educational practices for children in residential childcare.

Participants comprised a total of 68 children: 53 from Slovakia and the Czech Republic, representing several different children's homes, and 15 from a Ukrainian residential childcare institution that had been temporarily relocated to Poland as a result of the war. These children were accompanied by 21 childcare professionals, educators, and specialists, who ensured that the programme reflected both the lived experiences of the children and the professional expertise of practitioners.

Although the total sample size might appear limited, it must be emphasised that access to children in residential childcare for pedagogical research is inherently challenging. The study group, therefore, represents a rare and highly valuable research population. The participating children were both boys and girls, aged between 11 and 18 years, while the Ukrainian group constituted a unique case: they all originated from a single residential childcare institution and were exclusively boys. This composition made it possible to explore a diversity of perspectives within the Czech and Slovak groups, while also capturing the specific realities of a homogeneous group affected by forced displacement.

While the study does not claim to produce generalisable findings in the statistical sense, its value lies in the uniqueness and accessibility of the target group. Bringing together children from three distinct national systems of residential childcare within one participatory, intercultural setting created an unprecedented configuration for research. Previous research has often compared national systems in parallel, with attention directed mainly to structural or policy differences. This project, by contrast, brought children and professionals from three distinct systems into direct interaction, producing insights that could not be reached through

comparative analysis alone. The setting offered a rare opportunity to observe how educational, cultural, and sports activities function across diverse contexts while making visible both shared patterns and dynamics specific to individual systems.

The Visegrad Unity Games

At the centre of the project were the Visegrad Unity Games, a sports initiative that extended well beyond the realm of athletics. The event was intended to cultivate teamwork, empathy, and intercultural exchange, offering a structured yet playful space where children interacted across linguistic and national boundaries. Physical activity functioned both as a source of well-being and as a symbolic medium through which trust and social cohesion could take shape. Competition was intentionally marginalised, with attention directed instead toward the shared multicultural experience. Inclusion was not treated as an abstract principle but enacted through cooperative and embodied forms of interaction.

Visegrad Skills for Inclusion: Empowering through Education

Alongside the sports programme, an educational workshop entitled Visegrad Skills for Inclusion addressed the role of education in fostering civic and social competences. Activities focused on metacognition, self-reflection, and peer exchange, encouraging children to articulate regional similarities and differences in their educational experiences. The workshop highlighted agency, motivation for learning, and the development of soft skills essential for twenty-first-century citizenship.

Cultural Mosaic of the Visegrad Nations

The second workshop, Cultural Mosaic of the Visegrad Nations, used creative approaches such as drama-in-education, storytelling, and symbolic art. These activities allowed children and staff to share experiences, co-construct narratives, and reflect on questions of identity and belonging. The workshop encouraged cultural self-awareness while at the same time promoting mutual respect and giving children's voices a place within the varied cultural landscape of the Visegrad region.

Use of Artificial Intelligence in Participatory Practice

Both workshops systematically integrated AI applications as supportive educational and analytical tools. AI was used to facilitate personalised content creation, automatic transcription of reflections, and preliminary thematic analysis. Visual design tools supported the co-creation of artistic outputs, enabling children to see their contributions reflected in tangible outcomes. Importantly, AI provided not only technical assistance but also pedagogical opportunities by enabling adaptive learning and deepening participatory reflection. Its role in expanding the scope of inclusive education will be examined in greater depth in subsequent sections, with particular attention to ethical considerations and pedagogical added value.

Instrument and Procedures

The methodological framework of this study was shaped by the need to capture the lived educational opportunities of children in residential childcare. For this purpose, Participatory Action Research (PAR) was adopted as the core approach. PAR was selected because it does not treat children as passive research subjects but as active partners whose voices are

essential for understanding and transforming their environment. In residential childcare, where children's perspectives are often marginalised, PAR provides both an ethical and practical means of generating knowledge that is immediately relevant to practice (Cornish et al., 2023; Shamrova & Cummings, 2017). It links the process of inquiry with purposeful action, enabling empowerment, competence-building, and the creation of solutions responsive to children's genuine needs (Flicker, 2008; McIntyre, 2008).

Within this framework, qualitative methods were employed in ways that complemented one another. Semi-structured interviews gave children and professionals the chance to describe their experiences in their own words, while systematic observation of educational, sporting, and cultural activities offered contextual insight into patterns of interaction and the enactment of inclusive practices (Boyko, 2013; Dunwoodie et al., 2023; Espedal, 2022; Sirris et al., 2022). A focused case study, centred on a group of Ukrainian children evacuated to Poland, further illustrated how displacement and cultural background shaped both adaptation and participation in inclusive activities (Carter, 2024; Hamilton & Corbett-Whittier, 2013; Takahashi & Araujo, 2019).

These strands of evidence informed the PAR cycle in different yet interconnected ways. Observations grounded the findings in lived practice; interviews provided access to subjective perspectives; and the case study illuminated structural and contextual influences. Their integration, refined through collaborative analysis with participants and expert partners, appears to have ensured that the study generated results of both theoretical significance and practical value for inclusive education (Arnadottir et al., 2025; Cockerham, 2024).

Data Analysis

The data analysis combined elements of Interpretative Phenomenological Analysis (IPA) and Grounded Theory (GT). Together, these approaches allowed for close attention to individual accounts while also supporting the systematic development of theory from the data itself. IPA centres on how participants perceive and interpret their experiences, with emphasis on depth of meaning and the subjective lens through which life events are understood (Biggerstaff & Thompson, 2008; Rajasinghe, 2020). In the context of residential childcare, this focus is particularly pertinent, as children's trajectories are often shaped by unique constellations of lived experiences and by the strategies they adopt to navigate challenging circumstances (Alase, 2017; Van Manen, 2018).

GT complemented this interpretative lens by tracing emergent patterns and categories across the material and situating them within a broader conceptual framework (Makri & Neely, 2021). Through open, axial, and selective coding, categories were gradually refined and aligned with empirical evidence (Charmaz & Thornberg, 2021). The interplay of IPA and GT thus made it possible to preserve the specificity of individual voices while at the same time generating insights with wider theoretical resonance for understanding educational processes in residential childcare.

Given the cross-cultural nature of the project, the analysis was conducted comparatively to identify both similarities and differences among groups from different countries. At the same time, the individual perspective of each child was carefully respected, as experiences could vary significantly even within the same group, depending on personal history, prior educational opportunities, and current psychosocial circumstances.

Particular attention was devoted to the interpretation of data from the Ukrainian group. Their experience of forced displacement and life in exile presented specific challenges and opportunities for the educational process. Their reflections offered valuable insights into the role of cultural identity.

Findings were regularly discussed within the research team and triangulated with the perspectives of educators and professionals from participating institutions throughout the analytical process. This participatory validation helped minimise the risk of interpretive bias and ensured that the resulting themes accurately reflected the lived realities of the participants.

Summary of Methodological Approach

The methodological framework of this study draws on long-standing research into residential childcare and is complemented by a focused international initiative. By integrating cultural, educational, and sporting interventions with the exploratory use of artificial intelligence, the study seeks to advance the ongoing debate on inclusive education for children with experience of residential care.

What makes this project exceptionally distinctive is the simultaneous inclusion of three groups of children, each shaped by different national residential childcare systems: children from the Czech Republic, Slovakia, and Ukraine (temporarily living in Poland due to the war). Whereas most previous research has been limited to comparing national systems in parallel, this study introduced a rare and methodologically significant setting in which children and professionals from three diverse systems interacted directly. This approach enabled the identification of both cross-national commonalities and system-specific patterns that remain invisible in single-country or purely comparative studies.

The integration of these perspectives within a participatory action research framework provided a distinctive vantage point. It allowed not only the description of innovative educational practices but also their evaluation in terms of applicability and transferability across different cultural and institutional contexts. This design positions the study as a pioneering contribution to international research on residential childcare and inclusive pedagogy, offering insights that extend beyond the Visegrad region.

Ethics

The research was carried out in accordance with international standards for work with children and young people in sensitive social contexts and was guided by the ethical principles of Participatory Action Research (Correia, 2023; Kiernan & McMahon, 2024). It also drew on the concept of value-sensitive design, which places emphasis on explicit ethical commitments in the development of methods and tools, particularly when technological elements are involved (Jacobs & Hultdtgren, 2021). Before implementation, all participating institutions and individuals received clear information about the project's objectives, planned procedures, and anticipated outcomes. Informed consent was obtained from both the children and their legal guardians, using communication formats tailored to the children's age, cognitive abilities, and level of comprehension.

Particular emphasis is placed on protecting participants' identity and privacy. All data are anonymised, and photographs or audiovisual recordings are made only with prior informed consent. No such materials are disclosed without explicit authorisation. Identifiable information is stored separately from research data and is accessible only to a strictly limited group of authorised individuals.

Specific ethical risks are carefully addressed when artificial intelligence tools are employed. The most evident risk areas were especially those related to personal data protection, cultural sensitivity, and the relevance of generated content. All AI-generated outputs are subject to human review prior to use or dissemination to participants, in order to prevent the distribution of inaccurate, inappropriate, or culturally insensitive material.

The project consistently applied the principle of minimising the burden on children. Participation in both activities and research was voluntary, and participants could withdraw at any time without negative consequences. A safe and supportive environment was created to encourage open engagement without fear of judgement or stigmatisation. Observing these principles was not only an ethical requirement but also essential for the credibility of the findings. A strong ethical foundation fostered trust among participants and supported lasting collaboration between the researcher and the institutions involved.

Research Results

The findings of this study demonstrate that cultural, sporting, and educational activities within residential childcare function not merely as leisure opportunities but as catalysts for social inclusion, competence development, and intercultural learning. Despite the relatively small sample, the dataset is of exceptional value because it provides unique access to three distinct national systems of residential childcare and includes the specific circumstances of Ukrainian children displaced by war. Such a constellation of participants has not previously been examined within a single research design, which underscores the originality and relevance of the study.

The analysis of collected data revealed several consistent patterns. First, children described cultural and sports activities as spaces where they felt equal and recognised, a striking contrast to the marginalisation they often reported in formal schooling. Observations supported these accounts, showing strong participation across age and gender, as well as spontaneous expressions of peer support. Semi-structured interviews with professional staff added another perspective, emphasising the value of the participatory project design. Staff noted that it enhanced children's self-confidence and encouraged more open and trusting communication between caregivers and young people. Third, the focused case study of the Ukrainian group illuminated the additional challenges faced by displaced children, particularly language barriers and gender imbalance. At the same time, it showed that structured, inclusive activities enabled these children to integrate with peers from other countries more quickly than anticipated.

These results emphasise that participatory and culturally grounded approaches are not supplementary but central to inclusive education in residential childcare. The methodology, far from being an abstract research framework, actively facilitated conditions in which marginalised children could experience recognition and a stronger sense of agency.

Holistic Learning Environment

The findings suggest that the integration of educational, sporting, and cultural activities fostered an environment in which children felt secure, motivated, and recognised. This pattern was evident across all three national groups, although the aspects they valued differed. Czech participants stressed how sport helped them prepare for learning tasks. Slovak participants drew attention to collaboration and the friendships formed in group settings. Ukrainian participants described cultural activities as a safe space for self-expression and for articulating their personal identity. In the lists that follow, children are abbreviated as Ch and staff as St. Four dominant codes were identified and are presented in List 1, which illustrates how the holistic learning environment was shaped through the interplay of sport, culture, and education.

List 1
Partial Findings from the Area of Holistic Learning Environment

Significant Codes; Brief Description of the Code; Selected Statements
Code 1: <i>Sports as Equalisers</i> Sports activities provided an environment where children felt equal and included. Ch, CZ: "When we played games and then did the lesson, it was easier to focus, and I wanted to try." Ch, UA: "Sports made us friends, even if we didn't speak the same language." Ch, SK: "Running together felt like we were the same, nobody was better or worse." Ch, UA: "In football, we didn't need words, we just understood." St, CZ: "Sports made it easier to reach those who avoid school tasks." St, SK: "Physical games helped to balance differences between children very quickly."
Code 2: <i>Emotional Safety in Cultural Activities</i> Cultural and artistic activities created a safe space for self-expression and the sharing of emotions. Ch, UA: "When I painted, I showed them how we do it at home, and they liked it." Ch, CZ: "In art, I could show feelings without talking." Ch, UA: "The pictures I drew made me feel safe, like I was back home." Ch, SK: "When we sang together, I felt calm and brave to try more." St, UA: "At first, they were cautious, but art gave them a safe way to share feelings." St, CZ: "Children who are usually shy spoke more when the activity was playful."
Code 3: <i>Learning Through Playful Engagement</i>. Playful engagement supported spontaneous learning and cooperation. Ch, CZ: "It was fun to learn their songs, they were different but nice." Ch, SK: "I liked when we worked in pairs, because then we were stronger together." Ch, CZ: "I learned new words when we played with cards, it was not boring like in school." Ch, SK: "Games made me want to try even the hard parts, because we laughed together." St, SK: "They trusted each other more quickly when working in teams." St, CZ: "Play created an open atmosphere, which is rare in formal learning."
Code 4: <i>Competence Development Across Domains</i> Activities simultaneously supported linguistic, social, and cognitive skills. Ch, SK: "I helped them with words, and then we played card games together." Ch, CZ: "I learned to explain in English, even if just a little." Ch, UA: "I discovered I can draw and also tell my story in another language." Ch, CZ: "When we solved tasks after sport, it felt easier to think and talk." St, CZ: "They gained courage to speak up during the music session." St, UA: "They connected with peers quickly through games, even without full language understanding."
<i>Note.</i> Ch = child; St = staff (educators, professionals); CZ = Czech Republic; S = Slovakia; UA = Ukraine

The inclusion of educational, cultural, and sporting activities appeared to foster environments in which children felt a sense of equality, safety, and motivation. For the Czech participants, sporting activities were frequently described as energising and as helping them prepare for subsequent learning tasks. Slovak children, by contrast, placed greater emphasis on collaboration and the feeling of belonging within peer groups. Ukrainian participants often turned to cultural activities as a means of expressing identity and establishing a sense of security in unfamiliar surroundings. Observational data further suggested that playful forms of engagement enhanced children's ability to concentrate, while the interplay of different domains contributed to the development of linguistic, cognitive, and social competences.

Cross-National and Multicultural Inclusion

The multicultural setting brought to light different forms of engagement among the participating groups. Czech children showed curiosity toward unfamiliar practices and a

willingness to engage in cultural exchange. Slovak participants frequently assumed the role of mediators, drawing on their linguistic and cultural closeness to help bridge communication gaps between peers. Ukrainian children, though initially limited by language barriers, gradually became more involved through participation in sport, music, and artistic expression. Despite these differences, a shared sense of belonging began to emerge, indicating that collective experiences can at times outweigh linguistic and cultural divides. The most relevant codes are summarised in List 2, together with descriptions and illustrative statements that reflect the processes of cross-national and multicultural inclusion.

List 2

Partial Findings from the Area of Cross-National and Multicultural Inclusion

Significant Codes; Brief Description of the Code; Selected Statements

Code 1: *Shared Belonging Through Music and Games*

Music and games facilitated a sense of shared belonging that transcended language barriers.

Ch, SK: "Language barriers disappeared when music started." *Ch, UA*: "We clapped together, and suddenly we understood each other." *Ch, CZ*: "Singing made everyone equal." *Ch, UA*: "When we danced, I felt like we were one group." *St, CZ*: "Shared rhythm and music unified them more than any structured task." *St, SK*: "Games created a sense of belonging that words alone could not achieve."

Code 2: *Slovak Children as Cultural Mediators*

Slovak children acted as bridges between the Czech and Ukrainian groups, frequently translating and facilitating instructions.

Ch, SK: "I helped them with words, and then we played together." *Ch, CZ*: "Slovak guy explained us the game, we listened to him." *Ch, SK*: "I liked being the one who could say things to both sides." *Ch, UA*: "It felt good that they could translate and help everyone play together." *St, SK*: "They naturally acted as bridges; translation became part of play." *St, CZ*: "The Slovak group often made the Ukrainian children feel less excluded."

Code 3: *Ukrainian Children Overcoming Barriers*

Ukrainian children overcame language and cultural obstacles through embodied forms of participation in sports, music, and art.

Ch, UA: "Sports made us friends, even if we didn't speak the same language." *Ch, UA*: "When I painted, I showed them how we do it at home." *Ch, UA*: "At first I was shy, but when we clapped together, it was easier." *Ch, UA*: "I liked when they tried my words and I tried theirs." *St, UA*: "Art gave them a safe way to share feelings." *St, SK*: "Sports activities helped the Ukrainian group overcome their initial hesitation."

Code 4: *Czech Children as Explorers of Novelty*

Czech children demonstrated openness to new cultural stimuli and readiness to learn from others.

Ch, CZ: "It was fun to learn their songs, they were different but nice." *Ch, UA*: "They liked when they had to copy our game, it was easy for them." *Ch, CZ*: "Trying food from them was strange, but I liked it." *Ch, CZ*: "Their games were not like ours, so it was exciting." *St, CZ*: "They adapted quickly and showed real curiosity about new cultural elements." *St, SK*: "Czech children were often the first to try unfamiliar activities."

Multicultural activities revealed different patterns of engagement within each national group. Czech children adapted quickly and showed curiosity toward unfamiliar cultural elements. Slovak participants often acted as mediators, helping peers by translating or clarifying meanings. Ukrainian children, facing the greatest linguistic barriers, relied on sport, music and art, using rhythm, gesture and performance as ways of entering the group. Shared experiences in music and games nurtured a sense of belonging that transcended language and cultural divides and highlighted the inclusive potential of participatory activities.

AI-Enhanced Participatory Learning

The use of artificial intelligence (AI) in the project emerged as an important element supporting inclusive education in residential childcare. AI helped to overcome language barriers, enabled personalised learning, provided immediate feedback, and offered culturally sensitive stimuli. For children, this meant not only greater engagement but also the perception that technology could facilitate both learning and communication. List 3 presents significant codes with descriptions and illustrative statements that capture the role of AI in enhancing participatory learning.

List 3*Partial Findings from the Area of AI-Enhanced Participatory Learning***Significant Codes; Brief Description of the Code; Selected Statements***Code 1: AI as Language Bridge*

AI technologies facilitated translation and reduced tension arising from linguistic differences.

Ch, UA: "The tablet showed the same word in Czech and Ukrainian, and then we knew." *Ch, SK:* "I liked when it translated my word, so they understood me." *Ch, CZ:* "It was easier to play when the computer said what it means." *Ch, UA:* "I felt better when they could read my words too." *St, SK:* "It helped me explain quickly without stopping the activity." *St, CZ:* "AI reduced misunderstandings and kept the children engaged."

Code 2: Personalised Learning Support

AI allowed the adaptation of tasks to individual abilities and learning pace.

Ch, CZ: "I liked when the computer made an easier task just for me." *Ch, SK:* "The quiz changed for me when it was too hard." *Ch, UA:* "I liked that I could do it slowly, and it was still okay." *Ch, CZ:* "It gave me another try, so I did not feel bad." *St, CZ:* "The quiz adapted to their pace; slower children were not left behind." *St, SK:* "Children gained confidence because tasks felt achievable."

Code 3: Immediate Feedback and Motivation

Instant feedback increased motivation to continue and encouraged children to try new tasks.

Ch, SK: "It told me 'good job' right away, so I wanted to try again." *Ch, CZ:* "I was happy when it showed the green light fast." *Ch, UA:* "I liked when it clapped on the screen, it felt like winning." *Ch, CZ:* "I tried again because it said I was close to good." *St, CZ:* "Children reacted with excitement when they saw results instantly." *St, SK:* "Immediate feedback made them persist longer in tasks."

Code 4: Culturally Sensitive Mediation

AI reflected cultural identity and supported children's motivation.

Ch, UA: "The pictures showed something from our country, it felt nice." *Ch, CZ:* "It was cool when the presentation was full of interesting things, it felt like a game." *Ch, SK:* "We worked together on the tablet, and everyone had an idea, it was fun." *Ch, UA:* "With the translator, I could tell them what I wanted, and then we laughed together." *Ch, CZ:* "It was cool that it showed Slovak words too." *Ch, SK:* "When it played a song from here, we all knew it." *Ch, UA:* "Including Ukrainian symbols in tasks motivated me strongly." *St, UA:* "Including Ukrainian symbols in tasks motivated them strongly." *St, SK:* "Cultural adaptation kept the activities relevant and engaging."

The exploratory use of artificial intelligence functioned as a supportive tool in residential childcare. AI acted as a bridge for overcoming language barriers, personalised tasks to individual abilities, and provided immediate feedback that increased motivation. It also integrated culturally sensitive features that validated children's identities. While Czech children appreciated the playful and interactive dimension, Slovak children viewed AI as a collaborative tool, and Ukrainian children relied on it to communicate and participate on equal terms. Observations confirmed that technology contributed to inclusion when embedded within participatory and human-centred frameworks.

Synthesis of Findings

The analysis indicates that the integration of educational, sporting, and cultural activities in residential childcare produces outcomes that extend beyond momentary engagement. Such activities seem to create spaces where children experience recognition, develop a sense of agency, and strengthen intercultural competencies. At the same time, they encourage professionals to reflect on their own practice and adapt inclusive strategies within the particular national contexts in which they work. The contrasts between Czech, Slovak, and Ukrainian participants point to the influence of cultural traditions and socio-political conditions on how children engage with and benefit from such opportunities. Even so, certain elements recurred across all groups: children consistently reported peer support, shared involvement, and the beginnings of solidarity that may carry significance for their future social integration.

By combining children's accounts with the perspectives of professionals and systematic observation, this study offers insights into how residential childcare might be rethought. These institutions need not remain solely protective spaces; they can be shaped into environments that foster learning, nurture inclusion, and cultivate competences essential for participation in contemporary society. The findings form a basis for the discussion that follows, where the implications, possible limitations, and potential transferability of this model are examined within wider pedagogical and international contexts.

Discussion

The findings indicate that integrated programmes that combine sport, culture, and education in residential childcare function as core mechanisms for inclusion rather than optional enrichment. Evidence from youth development and arts-based pedagogy supports the claim that structured non-formal activities can enhance motivation, social bonding, and competence development (Hunter & Frawley, 2023). Sports and games are consistently associated with positive youth development when they prioritise teamwork, prosocial goals, and supportive climates, which aligns with the high participation and spontaneous peer support observed across groups (Fraser-Thomas et al., 2005). Arts-based sessions provide parallel benefits for emotional expression and identity work, particularly for children who are wary of formal schooling. These patterns accord with prior syntheses of sport-based youth development and arts-based resilience building (Salmon, 2023).

Group processes were central to these effects. A constructive group climate is known to reduce aggression and improve engagement in residential childcare settings (Claiborne et al., 2011; Tyrer & Fazel, 2014), which helps to explain why mixed-nationality teams and paired tasks produced rapid trust building and collaborative behaviour during the programme. The observed peer mediation and shared rule-making reflect conditions associated with safer, more participatory group climates in residential childcare (Hoffnung-Assouline et al., 2025).

Cross-national differences shaped how children entered and benefited from activities, yet the overall direction was convergent. Variation in national systems of residential childcare is well documented and carries consequences for practice, participation, and outcomes (Daněk et al., 2023). In that context, the present configuration of Czech, Slovak, and Ukrainian groups illustrates how common design principles can travel across systems while still being adapted to local expectations. The rapid social integration of the displaced Ukrainian group is consistent with evidence that structured group activities, including arts and sport, can mitigate barriers to belonging among refugee and asylum-seeking children (Sondermann et al., 2021; Van Der Helm et al., 2018).

Participation was not simply a design value but an operational mechanism. When children help set goals, translate instructions, and scaffold one another's engagement, decision-

making becomes distributed and agency is strengthened. This mirrors established participation frameworks that emphasise openings, opportunities, and obligations for shared decision-making in child-centred practice. The alignment between children's reported sense of equality in activities and the staff testimonies of improved communication fits this participatory logic (Bessell, 2011; Shier, 2021).

Artificial intelligence operated as a supporting layer that lowered participation barriers without substituting professional judgement. The tools used to simplify language, translate key terms, differentiate task difficulty, and summarise feedback correspond to documented strengths of AI for personalising learning and supporting heterogeneous groups. At the same time, work on the ethics of AI in education underlines that technological affordances must remain subordinate to human values, including privacy, transparency, and the primacy of relationships in vulnerable settings (Holmes et al., 2022). The present pattern aligns with that position (Levrrouw et al., 2018; Wang et al., 2024).

Two key implications emerge from the study. One concerns the design of inclusive programmes in residential childcare: they are most effective when conceived as holistic learning environments in which sport and culture are embedded within educational aims rather than treated as parallel add-ons (Coholic et al., 2012; Fraser-Thomas et al., 2005). Achieving this requires careful attention to the climate of the group, the roles assumed by peers, and the participatory structures that support meaningful involvement, all of which appear to contribute to safer and more engaging settings. The second implication relates to the use of artificial intelligence. AI can strengthen accessibility and responsiveness in situations where language barriers, literacy challenges, or cognitive processing demands might otherwise hinder participation (Zawacki-Richter et al., 2019). Its integration, however, should be guided by established ethical standards and kept firmly under professional oversight.

In this project, the use of artificial intelligence was exploratory and limited in scope. Further research is required to establish the practical and ethical conditions under which AI can contribute meaningfully to education (Yan et al., 2024). Within residential childcare, this represents a new and largely unexplored domain (Guérin et al., 2025). The findings must therefore be regarded as preliminary indications that highlight potential directions for systematic inquiry rather than conclusive results.

Limitations

Several limitations should be recognised to place the findings in context. The project lasted only three months and involved a small number of institutions. Although the sample covered Czech, Slovak, and Ukrainian settings, it cannot capture the full variability of residential childcare in the Visegrad region.

The Ukrainian group, evacuated to Poland because of the war, presented circumstances that were exceptional. Their adaptation and educational needs were shaped by displacement and insecurity, which makes their experience difficult to compare with the other participants.

The use of Participatory Action Research brought advantages in terms of authenticity and engagement, yet it also raised the possibility of interpretive bias linked to the researcher's dual role. Measures such as triangulation and validation with participants helped to reduce this risk, though it cannot be ruled out entirely.

Artificial intelligence was tested only on a pilot scale and adapted to the specific groups involved. Its use was exploratory and small-scale, and any conclusions about its potential should therefore be regarded as preliminary, pointing to areas for further exploration rather than conclusive results.

The research also unfolded in a shifting environment marked by staff changes, legislative reforms, and resource constraints. These external factors may have influenced both the delivery and the sustainability of the activities introduced.

These limits suggest that while the study offers important insights into the possibilities of participatory and holistic education in residential childcare, they should be read cautiously. Future research would profit from longer timeframes, broader samples, and systematic international comparisons, alongside controlled testing of AI-based interventions with close attention to ethics and cultural appropriateness.

Conclusions and Implications

This study demonstrates that participatory and culturally grounded activities in residential childcare, including sports, cultural programmes and educational initiatives, can function as powerful instruments of inclusion and competence building while also supporting intercultural learning. Children described these environments as spaces where they felt recognised and treated as equals, and observations indicated strong engagement and mutual support across groups.

The cross-national design, involving Czech, Slovak, and Ukrainian children, including those displaced by war, adds to the study's originality. Their experiences point to the importance of relational dynamics such as peer mediation and embodied forms of communication, which appear crucial for overcoming barriers and enabling participation.

The work further reveals the potential of artificial intelligence to enhance adaptability and accessibility in settings marked by linguistic and cultural diversity. At the same time, the findings caution against viewing technology as sufficient in itself: inclusion ultimately rests on trust, care, and human relationships.

Taken together, the results suggest that education in residential childcare can acquire a transformative quality when approached as a holistic and participatory process. In such circumstances, marginalised children do not merely gain knowledge; they also begin to experience belonging, exercise agency, and receive recognition. Future research could extend these insights through longer-term and comparative designs, testing whether inclusive and AI-supported approaches can become lasting features of residential childcare. The significance of this work reaches beyond the local setting, offering perspectives that may be relevant in other countries seeking to integrate children from diverse cultural and linguistic backgrounds.

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References

- Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, 5(2), 9–19. <https://doi.org/10.7575/aiac.ijels.v.5n.2p.9>
- Alfandari, R., & Taylor, B. J. (2023). Processes of multiprofessional child protection decision making in hospital settings: Systematic narrative review. *Trauma, Violence & Abuse*, 24(1), 295–312. <https://doi.org/10.1177/15248380211029404>
- Arnadottir, H. A., Seim, S., & Kristinsdottir, G. (2025). Invisible children and young people in child protection services. *European Journal of Social Work*, 1–12. <https://doi.org/10.1080/13691457.2025.2493317>

- Bach-Mortensen, A. M., Goodair, B., & Barlow, J. (2022). Outsourcing and children's social care: A longitudinal analysis of inspection outcomes among English children's homes and local authorities. *Social Science & Medicine* (1982), 313(115323), Article 115323. <https://doi.org/10.1016/j.socscimed.2022.115323>
- Bessell, S. (2011). Participation in decision-making in out-of-home care in Australia: What do young people say? *Children and Youth Services Review*, 33(4), 496–501. <https://doi.org/10.1016/j.childyouth.2010.05.006>
- Biggerstaff, D., & Thompson, A. R. (2008). Interpretative phenomenological analysis (IPA): A qualitative methodology of choice in healthcare research. *Qualitative Research in Psychology*, 5(3), 214–224. <https://doi.org/10.1080/14780880802314304>
- Boyko, E. J. (2013). Observational research--opportunities and limitations. *Journal of Diabetes and Its Complications*, 27(6), 642–648. <https://doi.org/10.1016/j.jdiacomp.2013.07.007>
- Bravo, A., Martín, E., & Del Valle, J. F. (2022). The changing character of residential care for children and youth in Spain. In J. K. Whittaker, L. Holmes, J. C. Fernandez Del Valle, & S. James (Eds.), *Revitalising residential care for children and youth* (1st ed., pp. 179–182). Oxford University Press. <https://doi.org/10.1093/oso/9780197644300.003.0013>
- Brend, D. M., Collin-Vézina, D., & Daignault, I. V. (2025). Claiming the edge as central: What residential childcare workers need to better serve children and families. *Residential Treatment for Children & Youth*, 42(3), 459–484. <https://doi.org/10.1080/0886571x.2025.2467106>
- Calheiros, M. M., & Patrício, J. N. (2012). Assessment of needs in residential care: Perspectives of youth and professionals. *Journal of Child and Family Studies*, 23(3), 461–474. <https://doi.org/10.1007/s10826-012-9702-1>
- Carter, D. (2024). Case study as a research methodology. In D. Carter & A. Piccoli (Eds.), *Power, Politics, and the Playground* (1st ed., pp. 5–7). Routledge. <https://doi.org/10.4324/9781003312451-2>
- Charmaz, K., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative Research in Psychology*, 18(3), 305–327. <https://doi.org/10.1080/14780887.2020.1780357>
- Chinn, L. K., Ovchinnikova, I., Sukmanova, A. A., Davydova, A. O., & Grigorenko, E. L. (2021). Early institutionalised care disrupts the development of emotion processing in prosody. *Development and Psychopathology*, 33(2), 421–430. <https://doi.org/10.1017/S0954579420002023>
- Claiborne, N., Auerbach, C., Lawrence, C., Liu, J., McGowan, B. G., Fernandes, G., & Magnano, J. (2011). Child welfare agency climate influence on worker commitment. *Children and Youth Services Review*, 33(11), 2096–2102. <https://doi.org/10.1016/j.childyouth.2011.06.002>
- Cockerham, D. (2024). Participatory action research: Building understanding, dialogue, and positive actions in a changing digital environment. *Educational Technology Research and Development*, 72(5), 2763–2791. <https://doi.org/10.1007/s11423-023-10294-1>
- Coholic, D., Eys, M., & Loughheed, S. (2012). Investigating the effectiveness of an arts-based and mindfulness-based group program for the improvement of resilience in children in need. *Journal of Child and Family Studies*, 21(5), 833–844. <https://doi.org/10.1007/s10826-011-9544-2>
- Cornish, F., Breton, N., Moreno-Tabarez, U., Delgado, J., Rua, M., de-Graft Aikins, A., & Hodgetts, D. (2023). Participatory action research. *Nature Reviews Methods Primers*, 3(1), Article 34. <https://doi.org/10.1038/s43586-023-00214-1>
- Correia, M. I. T. D. (2023). Ethics in research. *Clinical Nutrition Open Science*, 47, 121–130. <https://doi.org/10.1016/j.nutos.2022.12.010>
- Daněk, A. (2024). The issue of extraordinary talent in the residential childcare institution: Giftedness or dual exceptionality? *Pedagogika-Pedagogy*, 96(9), 1297–1307. <https://doi.org/10.53656/ped2024-9.09>
- Daněk, A., Šotolová, E., & Stárek, L. (2024). The effect of alcoholism on the destruction of relationship values. *AD ALTA: Journal of Interdisciplinary Research*, 14(1), 212–216. <https://doi.org/10.33543/j.1401.212216>
- Daněk, A., Šotolová, E., & Žolnová, J. (2023). Czech and Slovak systems of institutional care: Different approaches, common goals. *AD ALTA: Journal of Interdisciplinary Research*, 13(2), 50–54. <https://doi.org/10.33543/j.1203.5054>
- Dunwoodie, K., Macaulay, L., & Newman, A. (2023). Qualitative interviewing in the field of work and organisational psychology: Benefits, challenges and guidelines for researchers and reviewers. *Applied Psychology*, 72(2), 863–889. <https://doi.org/10.1111/apps.12414>

- Equit, C. (Ed.). (2024). *Participation in residential childcare: Safeguarding children's rights through participation and complaint procedures*. Verlag Barbara Budrich. <https://doi.org/10.3224/84742709>
- Espedal, G. (2022). Research interviews to investigate and co-create values. In G. Espedal, B. Jelstad Løvaas, S. Sirris, & A. Wæraas (Eds.), *Researching values* (pp. 117–132). Springer. https://doi.org/10.1007/978-3-030-90769-3_7
- Flicker, S. (2008). Who benefits from community-based participatory research? A case study of the positive youth project. *Health Education & Behavior*, 35(1), 70–86. <https://doi.org/10.1177/1090198105285927>
- Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education & Sport Pedagogy*, 10(1), 19–40. <https://doi.org/10.1080/1740898042000334890>
- Guérin, R. N., Hofmeijer, E. I. S., Kester, L. M., & Sensmeier, L. W. (2025). The responsible implementation of artificial intelligence in childcare. In J. Bayer & C. Grimme (Eds.), *Code and conscience* (Vol. 14400, pp. 113–133). Springer. https://doi.org/10.1007/978-3-031-52082-2_8
- Hamilton, L., & Corbett-Whittier, C. (2013). *Using case study in education research*. SAGE. <https://doi.org/10.4135/9781473913851>
- Hoffnung-Assouline, A., Attar-Schwartz, S., & Magalhães, E. (2025). Social images of youth in residential care: The role of personal contact with care-experienced individuals and empathy. *European Journal of Social Work*, 1–15. <https://doi.org/10.1080/13691457.2025.2494067>
- Holmes, W., Porayska-Pomsta, K., Holstein, K., Sutherland, E., Baker, T., Shum, S. B., Santos, O. C., Rodrigo, M. T., Cukurova, M., Bittencourt, I. I., & Koedinger, K. R. (2022). Ethics of AI in education: Towards a community-wide framework. *International Journal of Artificial Intelligence in Education*, 32(3), 504–526. <https://doi.org/10.1007/s40593-021-00239-1>
- Hunter, L., & Frawley, E. (2023). Engaging students using an arts-based pedagogy: Teaching and learning sociological theory through film, art, and music. *Teaching Sociology*, 51(1), 13–25. <https://doi.org/10.1177/0092055X221096657>
- Izzo, C. V., Smith, E. G., Sellers, D. E., Holden, M. J., & Nunno, M. A. (2022). Promoting a relational approach to residential child care through an organisational program model: Impacts of CARE implementation on staff outcomes. *Children and Youth Services Review*, 132, Article 106330. <https://doi.org/10.1016/j.childyouth.2021.106330>
- Jacobs, N., & Hultgren, A. (2021). Why value sensitive design needs ethical commitments. *Ethics and Information Technology*, 23(1), 23–26. <https://doi.org/10.1007/s10676-018-9467-3>
- James, S., Wilczek, L., Kilian, J., Timonen-Kallio, E., Bravo, A., Del Valle, J. F., Formenti, L., Petrauskienė, A., Pivoriene, J., & Rigamonti, A. (2022). A comparative analysis of residential care: A five-country multiple case-design study. *Child & Youth Care Forum*, 51(6), 1031–1062. <https://doi.org/10.1007/s10566-021-09666-6> selfdeterminationtheory.org
- Kendrick, A. (2015). Residential child care. In J. D. Wright (Ed.) *International encyclopedia of the social & behavioral sciences* (2nd ed., pp. 534–539). Elsevier. <https://doi.org/10.1016/b978-0-08-097086-8.28077-x>
- Kiernan, L., & McMahon, M. (2024). Guide to ethical research and design practice when working with vulnerable participants and on sensitive topics. *Journal of Engineering Design*, 1–19. <https://doi.org/10.1080/09544828.2024.2324401>
- Levrouw, D., Roose, R., Van Der Helm, P., Strijbosch, E., & Vandevelde, S. (2018). Developing a positive living group climate in residential youth care: A single case study. *Child & Family Social Work*, 23(4), 709–716. <https://doi.org/10.1111/cfs.12467>
- Luckin, R., & Cukurova, M. (2019). Designing educational technologies in the age of AI: A learning sciences-driven approach. *British Journal of Educational Technology: Journal of the Council for Educational Technology*, 50(6), 2824–2838. <https://doi.org/10.1111/bjet.12861>
- Mainzer, K., & Kahle, R. (2024). *Limits of AI - theoretical, practical, ethical*. Springer. <https://doi.org/10.1007/978-3-662-68290-6>
- Makri, C., & Neely, A. (2021). Grounded theory: A guide for exploratory studies in management research. *International Journal of Qualitative Methods*, 20, 1–14. <https://doi.org/10.1177/16094069211013654>
- McIntyre, A. (2008). *Participatory action research*. SAGE. <https://doi.org/10.4135/9781483385679>

- Rajasinghe, D. (2020). Interpretative phenomenological analysis (IPA) as a coaching research methodology. *Coaching: An International Journal of Theory, Research and Practice*, 13(2), 176–190. <https://doi.org/10.1080/17521882.2019.1694554>
- Salmon, U. (2023). An evaluation of an arts-based pedagogy: The benefits of cultural animation for SME owners in an economically deprived region. *Small Enterprise Research*, 30(2), 190–213. <https://doi.org/10.1080/13215906.2022.2112924>
- Shamrova, D. P., & Cummings, C. E. (2017). Participatory action research (PAR) with children and youth: An integrative review of methodology and PAR outcomes for participants, organisations, and communities. *Children and Youth Services Review*, 81, 400–412. <https://doi.org/10.1016/j.childyouth.2017.08.022>
- Shanks, E., Backe-Hansen, E., Eriksson, P., Lausten, M., Lundström, T., Ranta, H., & Sallnäs, M. (2021). Privatisation of residential care for children and youth in Denmark, Finland, Norway, and Sweden. *Nordic Welfare Research*, 6(3), 128–141. <https://doi.org/10.18261/issn.2464-4161-2021-03-02>
- Shier, H. (2001). Pathways to participation: Openings, opportunities and obligations. *Children & Society*, 15(2), 107–117. <https://doi.org/10.1002/chi.617>
- Sindi, I. (2022). Participation of children in residential care. In A. Falch-Eriksen & K. Toros (Eds.) *Professional practice in child protection and the child's right to participate* (1st ed., pp. 89–101). Routledge. <https://doi.org/10.4324/9781003150688-7>
- Sirris, S., Lindheim, T., & Askeland, H. (2022). Observation and shadowing: Two methods to research values and values work in organisations and leadership. In G. Espedal, B., Jelstad Løvaas, S., Sirris, & A. Wæraas (Eds.), *Researching values: Methodological approaches for understanding values work in organisations and leadership*. (pp. 133–151). Springer. https://doi.org/10.1007/978-3-030-90769-3_8
- Sonderman, J., Van Der Helm, G., Kuiper, C., Roest, J., Van De Mheen, D., & Stams, G. (2020). Differences between boys and girls in perceived group climate in residential youth care. *Children and Youth Services Review*, 120(1), Article 105628. <https://doi.org/10.1016/j.childyouth.2020.105628>
- Stárek, L. (2025, April). Education of seniors and modern technologies: Improving the quality of life in the digital age. *Revista Educa Online*, 19(1), 74–95. <https://revistaeducaonline.eba.ufrj.br/edi%C3%A7%C3%B5es-antiores/2025-1/education-of-seniors-and-modern-technologies-improving-the-quality-of-life>
- Szafrank, M., Gorczowska, J., Fabián, P., & Škoviera, A. (Eds.). (2022). *Child protection system - just think differently? Critical analysis of selected models* (1st edition). Wydawnictwa Uniwersytetu Warszawskiego.
- Takahashi, A. R. W., & Araujo, L. (2019). Case study research: Opening up research opportunities. *RAUSP Management Journal*, 55(1), 100–111. <https://doi.org/10.1108/RAUSP-05-2019-0109>
- Tyrer, R. A., & Fazel, M. (2014). School and community-based interventions for refugee and asylum seeking children: A systematic review. *PLoS ONE*, 9(2), Article e89359. <https://doi.org/10.1371/journal.pone.0089359>
- UNICEF. (2023, May 25). Children in alternative care. Data to strengthen child protection systems and outcomes for children in Europe. <https://www.unicef.org/eca/reports/children-alternative-care>
- Van Der Helm, G., Kuiper, C., & Stams, G. (2018). Group climate and treatment motivation in secure residential and forensic youth care from the perspective of self determination theory. *Children and Youth Services Review*, 93, 339–344. <https://doi.org/10.1016/j.childyouth.2018.07.028>
- Van Manen, M. (2018). Rebuttal rejoinder: Present IPA for what it is—interpretative psychological analysis. *Qualitative Health Research*, 28(12), 1959–1968. <https://doi.org/10.1177/1049732318795474>
- Vieriu, A. M., & Petrea, G. (2025). The impact of artificial intelligence (AI) on students' academic development. *Education Sciences*, 15(3), Article 343. <https://doi.org/10.3390/educsci15030343>
- Wang, S., Wang, F., Zhu, Z., Wang, J., Tran, T., & Du, Z. (2024). Artificial intelligence in education: A systematic literature review. *Expert Systems with Applications*, 252, Article 124167. <https://doi.org/10.1016/j.eswa.2024.124167>
- Whittaker, D. (2024). Alone in a crowd: Teacher-level and pupil-level hidden curricula and the theoretical limits of teacher–pupil relationships. *Education Sciences*, 14(5), Article 477. <https://doi.org/10.3390/educsci14050477>
- Yan, L., Sha, L., Zhao, L., Li, Y., Martinez-Maldonado, R., Chen, G., Li, X., Jin, Y., & Gašević, D. (2024). Practical and ethical challenges of large language models in education: A systematic scoping review. *British Journal of Educational Technology*, 55(1), 90–112. <https://doi.org/10.1111/bjet.13370>

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), Article 39. <https://doi.org/10.1186/s41239-019-0171-0>

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