



Jakub Adamczewski

<https://orcid.org/0000-0002-0152-3159>

e-mail: jakub.adamczewski@wskz.pl

Pomeranian University of Applied Sciences, Poland

Anna Knocińska

<https://orcid.org/0009-0001-0377-1340>

e-mail: anna.knocińska@wskz.pl

University College of Professional Education, Poland

Between Systemic Integration and Fragmentation: Outdoor Education in Polish Early Childhood Teacher Education in the European Context

Między podejściem systemowym a rozproszeniem.
Edukacja outdoorowa w kształceniu nauczycieli
edukacji przedszkolnej i wczesnoszkolnej w Europie

KEYWORDS

outdoor education,
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ABSTRACT

Outdoor education is increasingly recognised as an important component of contemporary education, yet little is known about how it is institutionalised within teacher education, particularly in Central and Eastern Europe. This study examines the presence of outdoor education in Polish early childhood teacher education programmes and interprets the findings within the context of selected European models. A qualitative document analysis was conducted using curricula and course syllabi from selected public and private universities. The analysis included both explicit references to outdoor education and related content concerning experiential learning, environmental education, and field-based activities. The findings indicate that outdoor education is not established as a distinct component of teacher education but is represented primarily through dispersed curriculum content and teaching approaches. Three levels of curriculum integration were identified – formal, content, and methodological – with the latter two clearly predominating. Compared with Scandinavian

models, the Polish approach remains fragmented and only weakly institutionalised. The study proposes an analytical framework for assessing the integration of outdoor education within teacher education programmes and contributes to the broader discussion on its institutionalisation.

SŁOWA KLUCZE

edukacja
outdoorowa,
kształcenie
nauczycieli,
edukacja
przedszkolna
i wczesnoszkolna,
uczenie się przez
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modele edukacji
outdoorowej

ABSTRAKT

Edukacja outdoorowa jest coraz częściej uznawana za istotny element współczesnej edukacji, jednak niewiele wiadomo o sposobach jej instytucjonalizacji w kształceniu nauczycieli, szczególnie w krajach Europy Środkowo-Wschodniej. Celem artykułu jest analiza obecności edukacji outdoorowej w programach kształcenia nauczycieli edukacji przedszkolnej i wczesnoszkolnej w Polsce oraz interpretacja wyników w kontekście wybranych modeli europejskich. Zastosowano jakościąową analizę dokumentów obejmującą programy studiów i sylabusy wybranych uczelni publicznych i niepublicznych. Analizie poddano zarówno bezpośrednie odniesienia do edukacji outdoorowej, jak i treści związane z uczeniem się przez doświadczenie, edukacją środowiskową oraz aktywnościami terenowymi. Wyniki wskazują, że edukacja outdoorowa nie stanowi odrębnego komponentu kształcenia nauczycieli, lecz występuje głównie w rozproszonych treściach programowych i rozwiązaniach metodycznych. Wyodrębniono trzy poziomy jej obecności: formalny, treściowy i metodyczny, z wyraźną dominacją dwóch ostatnich. Na tle modeli skandynawskich polski model kształcenia nauczycieli pozostaje fragmentaryczny i słabo zinstytucjonalizowany. Badanie wnosi propozycję ram analitycznych do oceny stopnia integracji edukacji outdoorowej w programach kształcenia nauczycieli.

Introduction

Educational systems increasingly recognise that meaningful learning extends beyond the classroom, placing greater emphasis on experience, participation, and authentic learning environments. This shift has redefined the teacher's role – from a transmitter of knowledge to a designer of learning environments that foster experiential learning (European Commission, 2019). Within this context, contact with nature is increasingly recognised as an important factor supporting children's cognitive, emotional, and social development. Research consistently demonstrates that learning in natural environments enhances understanding, increases student engagement, and promotes autonomy and psychological well-being (Rickinson et al., 2004; Chawla,

2015; Kuo et al., 2022). Across many European education systems, growing interest in outdoor education has been accompanied by efforts to embed it more systematically within curricula and teacher education (OECD, 2019). While the educational benefits of outdoor education are well established, considerably less is known about how future teachers are prepared to implement this approach, particularly in Central and Eastern Europe. In Poland, research addressing the place of outdoor education within teacher education remains limited. In particular, the extent and forms of its integration into early childhood teacher education programmes – whether systemic or fragmented – have received little scholarly attention (Michalak & Parczewska, 2019; Michalak, 2023). Addressing this gap, the present study examines the presence of outdoor education in Polish early childhood teacher education programmes and interprets the findings within the context of selected European models. By distinguishing between formal, content, and methodological levels of curriculum integration, the study contributes to the broader discussion on the institutionalisation of outdoor education in teacher education.

Outdoor Education – Theoretical Framework

Outdoor education represents a pedagogical approach aligned with the broader shift in learning paradigms that emphasise experience, student activity, and the environmental context of learning. There is no single, universally accepted definition of the concept due to its interdisciplinary nature and the diversity of educational practices (Michalak, 2023). The terms *outdoor education* and *outdoor learning* are often used interchangeably, although distinctions are sometimes made: the former typically refers to organised forms of education conducted outside the classroom, while the latter emphasises the learning process itself through direct interaction with the natural and social environment (Waite, 2017). In both cases, the environment is understood as an active component of learning rather than merely its physical setting.

One specific form of outdoor education is the *forest school* approach, developed primarily in Scandinavian and Anglo-Saxon contexts. It is based on regular engagement with natural environments and emphasises exploration, experiential learning, and the development of relationships with nature (Knight, 2013). Unlike occasional outdoor activities, forest school is continuous and integrated into everyday educational practice. Consequently, outdoor education should not be understood simply as learning conducted outside the classroom but as a distinct pedagogical approach grounded in direct experience, learner agency, and meaningful interaction with the environment (Michalak, 2023).

The theoretical foundations of outdoor education draw on several complementary pedagogical perspectives. Experiential learning theory conceptualises learning as a cyclical process in which knowledge is constructed through concrete experience, reflective observation, abstract conceptualisation, and active experimentation (Kolb, 1984). From this perspective, authentic engagement with the environment becomes a prerequisite for meaningful learning rather than merely an additional teaching strategy. Similarly, place-based education emphasises learning rooted in local environments and communities, connecting educational content with learners' everyday experiences while fostering environmental awareness and responsibility (Sobel, 2004). Ecological theories of development further highlight that children's learning is shaped through dynamic interactions between individuals and multiple environmental contexts (Bronfenbrenner, 1979). Together, these perspectives position outdoor education not only as a teaching method but as a pedagogical approach that integrates experience, place, and social interaction into the learning process.

A substantial body of research demonstrates that outdoor education supports children's cognitive, social, emotional, and physical development. Learning in natural environments enhances understanding of phenomena, promotes causal reasoning, and facilitates the integration of knowledge across domains (Rickinson et al., 2004). It also contributes to the development of competences associated with STEM/STEAM education, including observation, inquiry, and problem-solving (Barfod & Daugbjerg, 2018; Kuo, 2019). At the same time, outdoor learning promotes cooperation, autonomy, self-efficacy, and psychological well-being, while regular contact with nature has been associated with improved concentration, reduced stress, and increased motivation to learn (Chawla, 2015; Dettweiler et al., 2017; Kuo et al., 2022; Riley et al., 2024; Vasilaki et al., 2025).

From the perspective of teacher education, the critical issue concerns the competencies required to design and facilitate learning in diverse educational environments. Implementing outdoor education demands not only subject knowledge but also the ability to organise authentic learning experiences, respond flexibly to changing conditions, and integrate environmental contexts into educational practice (Michalak & Parczewska, 2019). Although teacher education programmes increasingly emphasise active learning methods and learner-centred pedagogies, these assumptions do not necessarily translate into systematic preparation for organising learning beyond the classroom. Consequently, outdoor education remains particularly sensitive to the gap between declarative curriculum assumptions and actual teacher preparation. Examining how outdoor education is represented within teacher education programmes therefore provides insight into the extent to which these contemporary pedagogical assumptions have become institutionally embedded in teacher education.

Outdoor Education Models in Europe

Outdoor education is implemented across European education systems in diverse ways, reflecting differences in educational traditions, curriculum design, and teacher education. Rather than representing a single model, European approaches vary primarily in the extent to which outdoor education is institutionally embedded within teacher preparation. For the purposes of this study, two ideal types can be distinguished: a systemic model, in which outdoor education constitutes an integral component of educational policy, curriculum, and teacher education, and a fragmented model, in which outdoor learning is implemented inconsistently and depends largely on institutional or individual initiatives.

The systemic model is characterised by the full integration of outdoor education into both school curricula and teacher education. The natural environment is treated as an equivalent learning space, and outdoor activities are planned regularly rather than occasionally. This approach is most fully developed in the Scandinavian countries, where outdoor education is deeply rooted in educational philosophy as well as institutional practice. In Denmark, the concept of *udeskole* involves regular teaching outside the classroom and interdisciplinary learning in authentic environments (Barfod & Daugbjerg, 2018).

In Norway, *friluftsliv* emphasises everyday contact with nature as an essential element of children's development. Similarly, in Sweden, outdoor learning is regarded as a natural component of everyday educational practice regardless of weather conditions, supporting children's autonomy, resilience, and holistic development (Adamczewski & Nagae, 2022). Across these systems, outdoor education is understood not as an additional teaching method but as a fundamental way of organising children's learning experiences.

In contrast, the fragmented model does not treat outdoor education as a distinct component of teacher education. Instead, it appears indirectly within broader areas such as environmental education, physical education, or active learning methodologies. Opportunities for learning outside the classroom therefore depend largely on individual teachers, institutional priorities, or local conditions rather than on systemic programme requirements (Waite, 2017). This approach is visible, for example, in the United Kingdom, where *learning outside the classroom* is promoted primarily as a pedagogical method rather than a compulsory element of teacher education.

Teacher education in many Central and Eastern European countries, including Poland, is generally closer to this fragmented model. Outdoor education is present mainly in declarative form, embedded within broader educational objectives but only rarely operationalised through dedicated courses, structured practical experiences, or explicit competence requirements (Michalak & Parczewska, 2019; Michalak, 2023).

Consequently, its implementation depends primarily on institutional interpretation and individual academic staff rather than on coherent national policy.

This distinction between systemic and fragmented approaches provides the interpretative framework for the study, locating Poland early childhood teacher education on a continuum between systemic and fragmented approaches and assessing the extent to which outdoor education is institutionally embedded.

Early Childhood Teacher Education in Poland – Systematic Context

The analysis of outdoor education in early childhood teacher education programmes in Poland requires situating it within the broader institutional context that shapes both the organisation and the priorities of teacher preparation. Study programmes are not solely the result of institutional autonomy but are strongly influenced by national regulations, teacher education standards, and the dominant model of teacher preparation. The primary framework is provided by the national regulation defining teacher education standards (Rozporządzenie..., 2024), which specifies learning outcomes, the scope of subject-specific, psychological-pedagogical, and didactic preparation, as well as the minimum number of teaching practice hours. Although the standards promote an integrated model of teacher preparation that combines theoretical knowledge with practical competences, they remain formulated at a relatively general level. Consequently, preparation for organising learning in diverse educational environments, including outdoor settings, is not explicitly addressed, leaving its implementation largely to institutional interpretation.

The organisation of teacher education programmes reflects a continuing tension between the declared integration of theory and practice and the realities of curriculum design. Study programmes are typically modular, with a predominance of theoretical instruction complemented by methodological training and school placements. Although teaching practice constitutes an essential element of teacher education, it is conducted primarily in conventional classroom settings, which tends to reinforce established teaching routines. As a result, opportunities to develop competencies related to outdoor education depend largely on individual academic staff, partner institutions, and local educational contexts rather than on coherent programme requirements.

These characteristics contrast with broader international trends in teacher education, which increasingly emphasise experiential learning, flexible learning environments, and the integration of education with local communities and natural settings (European Commission, 2019; OECD, 2019; Waite, 2017; Kuo et al., 2022). Against this background, the Polish model remains relatively formalised and

curriculum-driven, which may limit systematic preparation for teaching beyond the classroom. Consequently, the extent to which outdoor education is incorporated into teacher preparation depends primarily on institutional interpretation rather than explicit systemic requirements. This makes Polish teacher education a particularly relevant case for examining whether outdoor education has become institutionally embedded or continues to function as a fragmented element of teacher preparation.

Research Design and Methodology

The study employed a qualitative document analysis (desk research) to examine how outdoor education is represented within early childhood teacher education programmes in Poland. Document analysis is widely used in educational research to investigate institutional frameworks, curriculum design, and the declared assumptions underlying teacher preparation. It is particularly appropriate for analysing outdoor education, which is often embedded implicitly within curricula rather than presented as a distinct field of study.

A purposive sampling strategy was adopted to ensure institutional diversity. The sample included both public and private higher education institutions offering programmes preparing teachers for early childhood education. Four major public universities (University of Warsaw, Jagiellonian University, Adam Mickiewicz University, and Maria Grzegorzewska University) and three private institutions representing both academic and practice-oriented profiles (WSB Merito University, the University of Dąbrowa Górnicza, and Ignatianum University in Kraków) were selected. This combination enabled comparison across different organisational models of teacher education while maintaining a focus on institutions with established teacher preparation programmes. The research material comprised publicly available programme documentation, including curricula, module descriptions, and, where available, detailed course syllabi. University syllabus databases were consulted when additional information regarding course content, learning outcomes, or teaching methods was accessible.

The analysis was conducted in two stages. First, programme documents were examined to identify explicit references to outdoor education, such as outdoor learning, learning outside the classroom, or nature-based education. Second, broader curriculum content associated with outdoor education – including environmental education, experiential learning, field-based activities, and place-related learning – was analysed to identify implicit forms of its integration. Particular attention was paid to the organisational form of these elements (stand-alone courses, curriculum modules, or embedded content), their theoretical or practical orientation, and their relationship to teaching practice. The analysis was qualitative and interpretative, aiming to identify

recurring patterns and differences in the conceptualisation of outdoor education rather than to quantify its occurrence.

Several limitations should be acknowledged. The study included a limited number of higher education institutions and relied on documents that differed in scope and level of detail. In some cases, access to complete syllabi was restricted, and the analysed materials referred to different academic years (2022–2026). Furthermore, document analysis captures the formal and declarative dimension of teacher education rather than its actual implementation in teaching practice. Differences between institutional profiles may also influence how outdoor education is represented within curricula. Finally, the European models discussed in the theoretical part of the article were not examined empirically but serve as an interpretative framework for understanding the Polish case. The analytical focus was therefore not solely on the presence of outdoor education but also on the extent to which it was systematically integrated into teacher education programmes.

Findings: The Fragmented Presence of Outdoor Education in Teacher Education Programmes

The analysis of study programmes and available course syllabi indicates that outdoor education is not established as a distinct and autonomous component of early childhood teacher education in Poland. In most of the analysed institutions – both public and private – it is neither offered as a separate compulsory course nor organised as a coherent curriculum module. The only exception is Adam Mickiewicz University, where outdoor education is available as an elective course, making it an optional rather than a mandatory element of teacher preparation. Nevertheless, the absence of a formally defined component does not imply the absence of related content. Instead, the analysis reveals that outdoor education is represented in fragmented and inconsistent ways across programmes.

Three levels of its representation were identified. The formal level refers to stand-alone courses or curriculum modules explicitly devoted to outdoor education; these were found only rarely and primarily as elective offerings. The content level includes environmental education, nature-related topics, and references to learning in local or natural environments embedded within broader courses. The methodological level encompasses teaching approaches based on experiential learning, student activity, and the use of diverse learning environments, even where outdoor education is not explicitly named. Across the analysed programmes, the second and third levels predominated, whereas explicit curricular integration at the formal level remained exceptional.

This pattern is reflected in institutional differences. At Jagiellonian University, programme documentation includes explicit references to field trips, nature observation, school garden activities, learning outdoors, and elements associated with the forest school approach. These examples indicate a partial operationalisation of outdoor education through both course content and teaching methods. At Adam Mickiewicz University, the elective course is complemented by related content embedded in other modules, representing a combination of formal and dispersed integration. In the remaining institutions – including the University of Warsaw, Maria Grzegorzewska University, Ignatianum University, WSB Merito University, and the University of Dąbrowa Górnicza – references appear mainly at the content and methodological levels. They are typically expressed through environmental education, the organisation of learning environments, or experiential teaching methods, without explicit preparation for outdoor teaching or clearly defined competence development.

Across all analysed programmes, theoretical and declarative content clearly predominates over practical preparation. Although curricula frequently emphasise the importance of diverse learning environments, these declarations are only rarely translated into structured educational experiences such as regular outdoor activities, place-based learning, or field-based projects. Likewise, teaching practice – despite constituting a compulsory element of teacher education – remains focused primarily on conventional classroom settings. Opportunities to implement outdoor learning therefore depend largely on individual initiative, institutional culture, and the specific characteristics of placement schools rather than on programme requirements.

Towards a More Systemic Approach to Outdoor Education: Conclusions and Recommendations

The findings of this study indicate that outdoor education occupies a fragmented and only weakly institutionalised position within early childhood teacher education in Poland. Rather than functioning as a coherent component of teacher preparation, it is represented mainly through dispersed curriculum content and teaching approaches, while explicit curricular structures remain exceptional. Although national teacher education standards create opportunities for learning beyond the classroom, they do not provide sufficient guidance for its systematic implementation. Consequently, the integration of outdoor education depends largely on institutional interpretation and the interests, experience, and expertise of academic staff.

Situated within the broader European context, the Polish case is positioned closer to the fragmented than the systemic model of outdoor education identified in this study. Unlike Scandinavian approaches, where natural environments constitute an

integral part of educational philosophy, curriculum design, and teacher preparation, outdoor education in Poland remains peripheral rather than institutionally embedded. This comparison does not imply that Scandinavian models should be directly transferred to the Polish context. Instead, it illustrates how different levels of institutional integration shape opportunities for preparing future teachers to use outdoor learning environments.

Beyond documenting the current state of teacher education, the study offers an analytical framework for examining how outdoor education is represented within teacher education programmes. The distinction between the formal, content, and methodological levels of curriculum integration provides a conceptual lens that may also prove useful in comparative research on teacher education across different national contexts. The findings further suggest that the principal challenge lies not in the absence of outdoor education itself but in the lack of coherent mechanisms supporting its systematic integration into teacher preparation. As a consequence, outdoor education continues to function largely as part of the hidden curriculum, relying on institutional interpretation rather than explicit programme design.

The findings also indicate several directions for strengthening teacher education. Rather than introducing stand-alone courses, greater emphasis could be placed on explicitly incorporating competencies related to planning, implementing, and evaluating learning in outdoor environments within existing teacher education standards. Practical experiences beyond the classroom could be more systematically embedded in methodology courses and teaching placements, while partnerships with schools, environmental education centres, and local organisations could create more opportunities for authentic learning experiences. Equally important is supporting the professional development of academic staff, whose expertise often determines whether outdoor education becomes a meaningful component of teacher preparation.

In conclusion, strengthening outdoor education requires adaptation rather than direct transfer of European models. Clearer curriculum expectations, more practice-based learning, and support for academic staff could foster more coherent teacher education and better prepare future teachers to use diverse learning environments.

References

- Adamczewski, J., & Nagae, Y. (2022). Come rain or shine: The Swedish preschools philosophy on learning in nature. *Edukacja Elementarna w Teorii i Praktyce*, 17(3/66), 73–89. <https://doi.org/10.35765/eetp.2022.1766.05>
- Barfod, K.S., & Daugbjerg, P. (2018). Potentials in udeskole: Inquiry-based teaching outside the classroom. *Frontiers in Education*, 3, Article 34. <https://doi.org/10.3389/educ.2018.00034>

- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Chawla, L. (2015). Benefits of nature contact for children. *Journal of Planning Literature*, 30(4), 433–452. <https://doi.org/10.1177/0885412215595441>
- Dettweiler, U., Becker, C., Auestad, B.H., Simon, P., & Kirsch, P. (2017). Stress in school: Some empirical hints on the circadian cortisol rhythm of children in outdoor and indoor classes. *International Journal of Environmental Research and Public Health*, 14(5), Article 475. <https://doi.org/10.3390/ijerph14050475>
- European Commission. (2019). *Key competences for lifelong learning*. Brussels. <https://doi.org/10.2766/569540>
- Knight, S. (2013). *Forest school and outdoor learning in the early years*. SAGE Publications.
- Kolb, D.A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
- Kuo, M. (2019). Do experiences with nature promote learning? Converging evidence of a cause-and-effect relationship. *Frontiers in Psychology*, 10, Article 305. <https://doi.org/10.3389/fpsyg.2019.00305>
- Kuo, M., Barnes, M., & Jordan, C. (2022). Do experiences with nature promote learning? Converging evidence of a cause-and-effect relationship. In R. Jucker & J. von Au (Eds.), *High-quality outdoor learning: Evidence-based education outside the classroom for children, teachers and society* (pp. 47–66). Springer. https://doi.org/10.1007/978-3-031-04108-2_3
- Michalak, R. (2023). Edukacja outdoorowa w polskiej szkole w świetle danych empirycznych. *Meritum. Mazowiecki Kwartalnik Edukacyjny*, 2(69), 11–19.
- Michalak, R., & Parczewska, T. (2019). *(Nie)obecność outdoor education w kształceniu szkolnym*. Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- OECD. (2019). *Teachers and school leaders as lifelong learners*. OECD Publishing. <https://doi.org/10.1787/1d0bc92a-en>
- Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M.Y., Sanders, D., & Benefield, P. (2004). *A review of research on outdoor learning*. National Foundation for Educational Research & King's College London.
- Riley, M., Sibthorp, J., & Rochelle, S. (2024). The developmental value of independent student expeditions in outdoor adventure education for emerging adult-aged participants. *Journal of Outdoor Recreation Education and Leadership*, 16(2), 35–51. <https://doi.org/10.18666/JOREL-2024-11778>
- Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 25 lipca 2019 r. w sprawie standardu kształcenia przygotowującego do wykonywania zawodu nauczyciela. (2024). Dz. U. 2024, item 453. <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20240000453>
- Sobel, D. (2004). *Place-Based education: Connecting classrooms and communities*. The Orion Society.
- Vasilaki, M.-M., Zafeiroudi, A., Tsartsapakis, I., & Grivas, G. V. (2025). Learning in nature: A systematic review and meta-analysis of outdoor recreation's role in youth development. *Education Sciences*, 15(3), Article 332. <https://doi.org/10.3390/educsci15030332>

Waite, S. (2017). *Children learning outside the classroom: From birth to eleven*. SAGE Publications.

Source materials

The analysed source materials were collected from official university websites and Public Information Bulletins (BIP) (accessed: 30 March 2026).