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From Distance to Participation: A Systemic Perspective on Inclusive Museum Access for Rural Kindergartens in Romania

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In Romania, rural isolation limits young children's access to cultural and educational resources. Students at the Oslo School of Architecture and Design (AHO) developed a project in 2025–2026, collaborating with Romanian cultural institutions and local partners. The research explored how museums, especially the Museum of Archaeology, History, and Art in Buzău, can serve educational roles beyond their physical locations. Using a Systems-Oriented Service Design approach, the project combined research, systemic mapping, and participatory practices. Gigamapping functioned as both an analytical and communication tool, revealing barriers, opportunities, and power dynamics across micro, meso, and macro levels. Methods like ZIP analysis and stakeholder workshops helped build shared understanding and validate hypotheses. Rather than fixed solutions, the project focused on adapting museum pedagogical practices to diverse territorial contexts and activating strategic interventions for systemic change. It highlights gigamapping as a critical design practice that navigates complexity and fosters dialogue among diverse actors addressing challenges in marginalised cultural and geographic settings.

KEYWORDS: Participatory gigamapping, cultural accessibility, museum inclusivity for kindergartens, Romanian remote communities, holistic diagnosis.

Background

Expanding museum education to remote kindergarten communities in Romania

The Museum of Archaeology, History and Art of Buzău, with the support of the All Grow association, aims to expand its audience and reach kindergartens located in the most remote areas of Romania. While the museum is already a cornerstone of the local cultural scene, its current programming excludes children under seven and fails to reach communities unable to physically access the museum. To bridge this gap, the project used the gigamapping (Sevaldson, 2011) process with key stakeholders during the Participatory Gigamapping course at AHO. It helped visualise the systemic challenges of early childhood inclusion and identify new opportunities for remote educational engagement.

The research sought to map the ecosystem connecting museums, kindergartens, local communities, and sustainability efforts to better adapt educational approaches to each local context. Within this broader framework, Romania presents a historically impoverished context. Even today, a significant part of the population lives below the poverty line, particularly in communities outside major cities. These conditions limit access to fundamental rights such as healthcare and education. Children in these areas are often socially isolated, and their childhood is frequently marked by family separation as fathers migrate abroad for financial support.

Building on these premises, the project addressed challenges beyond the immediate context, such as managing uncertainty and fostering structured collaboration with stakeholders. The process involved designing and facilitating workshops for active involvement and analysing the interconnections within a complex service environment. Furthermore, the journey required autonomous decision-making supported by a critical design approach.

The research was made with an overall question in mind:

> How might we create museum pedagogical materials that will foster an inclusive approach for kindergarten children who live in far remote areas?

The work followed Systems-Oriented Service Design (Suoheimo et al., 2025) to approach inclusion as a "wicked problem" (Rittel & Webber, 1973; Määttä, 2024). This methodology draws from both systems-oriented and service design principles. Both are essential when designing public services, as they require systems thinking to bridge silos and integrate multiple perspectives into a coherent service ecosystem.

This student work is part of the larger Erasmus+ project, Early Education in Museums for an Inclusive Future (MusEdu). This initiative aims to create inclusive pedagogical materials across four countries: Finland, Norway, Italy, and Romania. While the challenges of inclusion are situational and vary by country, the partners collaborate to learn from one another. The ultimate goal is for diverse museums to access these materials, serving as a broader inspiration for inclusive education.

Methods and Process

The creative process was divided into different tasks. The first round of gigamapping was conducted through desktop research to become more acquainted with the topic and challenge in question. This was followed by a contextual interview with the co-founder of All Grow in Romania. The aim of the interview was to be better prepared for a co-design workshop with the stakeholders, which was one way to ensure that the right topics would be covered during the session. This moment served both to clarify some relationships that were not fully understood and to reorient the focus towards the key themes raised by the stakeholders, mainly related to issues of inclusion for children and engagement of local communities.

The work then transitioned to the workshop design, where activities were structured to foster a participatory atmosphere and promote dialogue among the various actors. Timing, supporting tools and facilitation methods were defined in order to overcome possible linguistic or cultural barriers. Before its actual implementation, the workshop was tested with classmates in order to evaluate its clarity and duration. Following this

test, several modifications were made with the aim of increasing the opportunities for discussion.

A total of four women participated in the online workshop. All of them were Romanian and represented museum personnel, the All Grow association, kindergarten educators, and parents of young children, all closely connected to the project's themes. The average age of the participants was 41,5 years, ranging from 45 to 32 years. The average years of experience was 16, ranging from 2 to 30 years.

The issues covered in the workshop were taken into the gigamap. Parallel students used the ZIP analysis tool (Sevaldson, 2022). The use of this method made it possible to work across all three levels of analysis employed - micro, meso and macro - and to evaluate multiple recurring criticalities, such as physical barriers, dependence on private transport or buses, and the level of fragmentation in institutional collaboration. In this phase, the first types of potential interventions were identified, and subsequent work was initiated. Based on the information obtained, the gigamap was reworked, generating a more balanced framework of relationships than before, especially due to an additional layer that was introduced.

Subsequently, the Power Compass (Fidos et al., 2025) was used to question what had emerged regarding hierarchy and power relations among the components of the system, seeking to understand which aspects could compromise cohesion and solidarity among the various elements of the system and, consequently, our design efforts.

Finally, based on the previous analyses, the work focused on identifying leverage points, namely those strategic points within the system where targeted interventions can generate significant effects. The leverage points guided the definition of possible directions of intervention, understood not as definitive solutions, but as actions capable of activating progressive changes within the educational and cultural ecosystem.

Gigamap

The gigamap was developed as a relational analytical tool to connect information, actors, and dynamics pertaining to the accessibility of the Buzău museum for kindergartens in remote rural areas of Romania. Rather than reducing complexity, it renders visible relationships, tensions, and critical issues across multiple systemic levels. Children in remote kindergartens occupy the centre of the map, functioning as the primary reference point from which all other elements radiate.

The map is structured into three thematic areas (Figure 1). The Social Field documents material and social conditions such as poverty, parental migration, and constrained access to health and education. The Institutional Field charts the broader governance landscape of public policies, European programmes, and governmental and non-governmental actors, making visible the structural constraints within which museums and kindergartens operate. The Actors & Practices section maps those most directly implicated in the system, including educators, parents, local associations, and project partners, alongside existing and potential collaborative arrangements. A legend specifies the meaning of colours, shapes, and connecting lines, distinguishing between collaborations, impacts, identified tensions, and potential areas of intervention.

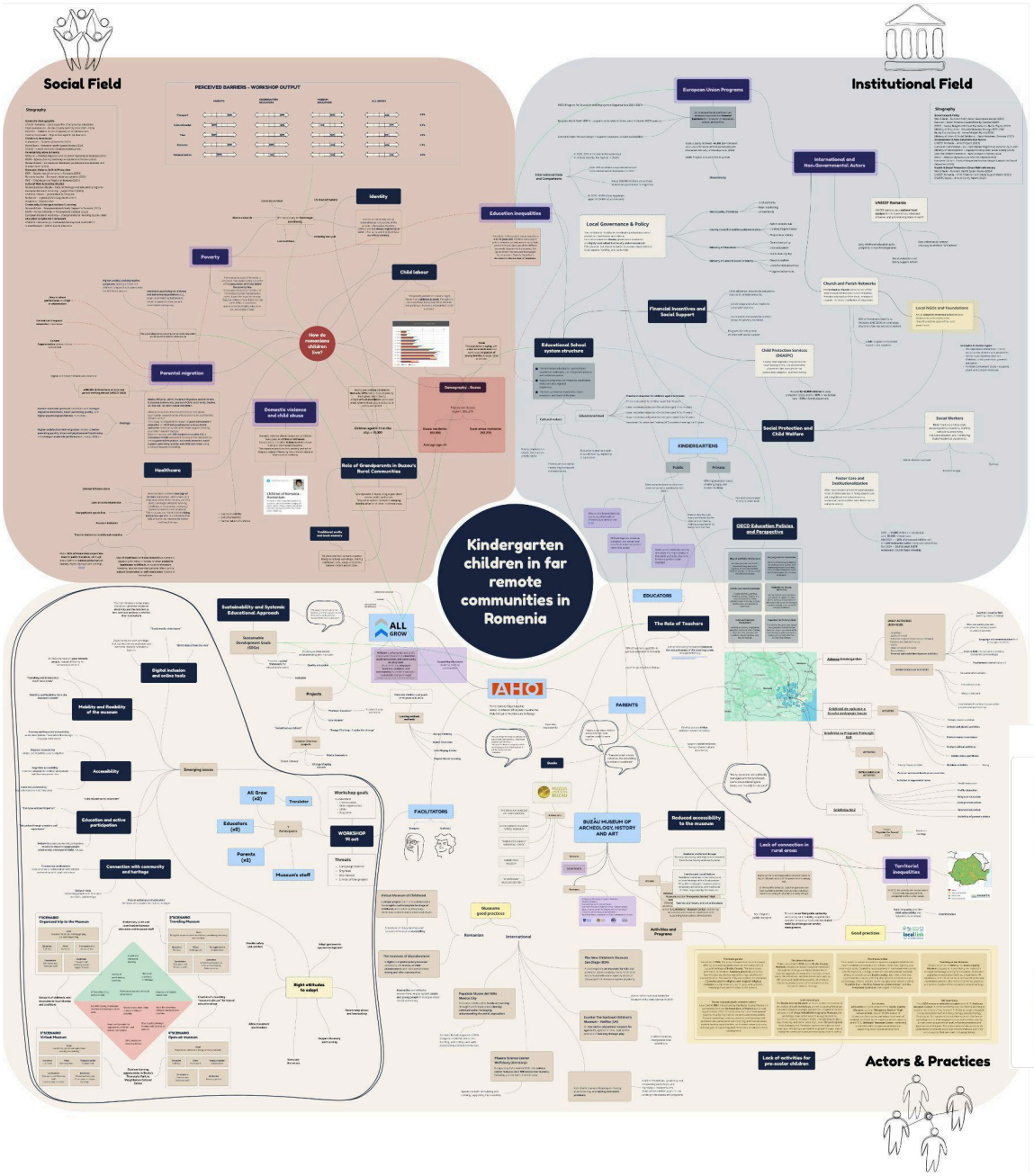


Figure 1. The final gigamap of the Romanian case that aims to map the challenges of bringing a local museum to far remote communities.

Reflection

Gigamapping proved to be oriented not towards definitive results, but towards the continuous construction and deconstruction of a situation, fostering a shared understanding of complexity. Visualising the relationships, tensions, and overlaps between social, cultural, and spatial factors within a single framework was essential. This approach allowed for a level of systemic interconnection that linear analysis could not support. A particularly significant step was the transition from descriptive reading to critical analysis. Gigamapping functioned as an interrogative tool, capable of questioning initial hypotheses and opening new avenues of investigation.

The initial intentions of the project were only partially achieved. The economic, educational, and cultural complexity of the context imposed significant constraints on the scope of possible interventions. A fundamental challenge concerns the nature of the target user, specifically a child of four or five years old whose mobility and access to cultural experiences depend entirely on the adults responsible for them. Educators, in particular, face considerable difficulties in organising visits outside the kindergarten due to limited staff and the logistical demands of supervising very young children. For this reason, the proposed interventions shifted focus away from physical access to the museum. Instead, they aimed to bring the museum closer to children through interactive and engaging activities, designing materials that would be meaningful for the children, educators, and parents who mediate their relationship with cultural institutions.

This project represented the first experience working with tools such as gigamapping. One of the most significant learnings was the importance of trusting the process and treating all information as relevant, as nothing should be taken for granted. This resonated with the iterative design process already familiar to the team, where every element can be revised and reinterpreted under a new perspective. However, the personal connection to the project was at times limited by physical and geographical distance. Conducting the workshop online reduced the quality of interaction compared to other projects, leaving fewer opportunities for the spontaneous exchange that typically enriches participatory processes.

The feedback received from All Grow, the primary stakeholder involved throughout the process, was consistently positive. From the early stages to the final outcomes, All Grow expressed genuine interest in the results and a clear intention to act as an intermediary with the Buzău museum, facilitating further discussion around the findings and their potential implementation. Overall, the process contributed to a more conscious design approach. In this view, the project functions as an open device capable of accommodating uncertainty and change, rather than as an immediate response to a problem.

Conclusion

This research offers a sense of direction rather than a definitive solution, serving as a starting point for further reflection. The aim was not to resolve the multifaceted complexities facing the Buzău museum, but rather to provide strategic orientations to inform future decision-making. Through the integrated application of gigamapping and ZIP analysis, it was possible to identify concrete leverage points, which in turn supported the formulation of feasible interventions.

Certain proposals build upon existing resources, such as the Museum bus, which could be augmented with pedagogical activities specifically tailored to early childhood. Others explore digital avenues, investigating how remote communities might be engaged through accessible technological tools. Crucially, any sustainable intervention must address underlying structural conditions, such as funding, policy frameworks, and institutional governance, rather than limiting its focus solely to direct project outcomes.

Beyond its specific contributions to MusEdu, this project holds broader significance within the field of social design. It demonstrates how systemic tools can address deeply rooted inequalities in access to culture and education, while reinforcing the principle that design must operate with humility. This approach acknowledges the inherent limits of design agency while precisely identifying where it can generate a meaningful impact.

On a professional and personal level, this work prompted a deeper reflection on the social responsibilities embedded in design practice. Designing for vulnerable communities demands not only methodological rigour, but also a profound ethical commitment and empathy. The capacity to adopt the perspective of others and to

comprehend the lived realities of a child in a remote Romanian village is not a peripheral concern; rather, it is a fundamental dimension of the design process itself.

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