

Games, Learning, and Digital Heritage: Playable Past and Educational Future in the GameTable COST Action

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Abstract

This article explores the role of Working Group 5 (WG5) within the GameTable COST Action (CA22145), a pan-European initiative dedicated to the computational study and public dissemination of traditional games as cultural heritage. WG5 focuses on the educational and public engagement dimensions of this mission, translating research on historical games into pedagogical tools, participatory experiences, and digital applications. Organized into three focus groups, Education, Digital Exhibition, and the General Game System, WG5 has developed a range of outputs, including teacher booklets, glossaries, an artificial intelligence-assisted adventure game for educators, and a citizen science-enabled digital exhibition. It has also proposed a pan-European school tournament hosted on the Ludii platform, designed to promote game literacy and intercultural learning. Finally, WG5 contributes to GameTable's sustainability goals through plans for resource hubs, continued training programs, and museum partnerships. The article situates these activities within broader frameworks of game-based learning, gamification, and participatory digital heritage, demonstrating how games can serve as powerful tools for inclusive education, heritage interpretation, and cross-sector collaboration.

Keywords

board games

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1 Introduction

Games are among the most enduring and universal expressions of human culture, functioning both as material artifacts and performative practices that encapsulate and transmit collective identities, memories, and meanings (Mochocki, 2023). As such, they serve as “sites of cultural memory,” in which rule structures, material components, and shared experiences enable communities to reconstruct, simulate, and reconfigure historical and social narratives (Begy, 2015; Caselli, 2021). Moreover, games can function as tools for identity formation, providing players with frameworks for exploring social roles, cultural values, and historical contexts (Begy, 2015), while also supporting modes of learning rooted in play and interaction (Liu & Nie, 2023).

The GameTable COST Action (CA22145), *Computational Techniques for Tabletop Games Heritage* (<http://gametable.network>), is a pan-European interdisciplinary network dedicated to the reconstruction, analysis, and communication of traditional tabletop games (Piette et al., 2024). It brings together archaeologists, computer scientists, historians, educators, and designers to explore the tangible and intangible dimensions of games as heritage (Crist et al., forthcoming), situating gameplay within broader narratives of cultural memory, pedagogical innovation, and digital heritage practice. Within this framework, Working Group 5 (WG5) is tasked with turning research into action: implementation, dissemination, and

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education. As articulated in the network's Memorandum of Understanding (MoU), WG5 coordinates the development of public-facing tools and activities that ensure the visibility, accessibility, and pedagogical relevance of GameTable outputs (COST, 2023). This includes fostering collaborations with cultural institutions, designing inclusive educational materials, and supporting the deployment of digital tools such as the Ludii game system (Piette et al., 2020).

To meet these aims, WG5 has structured itself into three thematic focus groups:

1. General Game System: Ensuring that computational game frameworks such as Ludii and other tools serve the needs of educators, designers, and public audiences
2. Educational Materials: Developing teacher-oriented content, assessment tools, and gamified learning experiences
3. Digital Exhibition: Designing a multimedia exhibition to communicate the richness and diversity of game heritage

This article presents a narrative of WG5's work from the first in-person meeting in Santorini (October 2024) to the Rome meeting (March 2025). It draws on minutes, internal discussions, and focus group reports to document the group's trajectory, showcase preliminary outputs, and reflect on the broader implications for digital heritage and education. The following sections will outline WG5's mandate and deliverables, examine key initiatives in development, and discuss the group's dissemination strategy and future directions. Through this lens, we highlight how WG5 serves as a bridge between scholarly research and wider public, transforming traditional games into tools for learning, exploration, and engagement.

2 WG5's Mandate and Structure

Within the GameTable COST Action, WG5 is charged with a comprehensive and outward-facing role: to ensure that the Action's research outputs are not only implemented effectively but also widely disseminated and integrated into educational and public contexts. The responsibilities of WG5, as defined in the MoU, span from outreach and communication to the design of educational interventions and the coordination of digital engagement strategies (COST, 2023). To operationalize these goals, WG5 was structured into three specialized focus groups, each addressing a distinct yet interlinked aspect of the group's mission.

2.1 General Game System

This focus group is centered on adapting and extending the *Ludii platform*, a computational game framework originally developed for research in artificial intelligence (AI) and general game playing (Browne, 2020; Crist et al., 2024a; Crist & Soemers, 2023; Piette et al., 2020). Recognizing Ludii's potential beyond its initial computer science applications (Crist et al., 2024b; Piette et al., 2021), WG5 aims to ensure that the platform is usable by educators, students, museum professionals, designers, and non-specialist researchers (Stephenson et al., 2019).

The group has identified a diverse range of user profiles, categorized by objectives, skill levels, and disciplinary background, and emphasized the need for user-friendly interfaces, targeted tutorials, and curated content. Discussions in Santorini and Rome emphasized the dual challenge of technical accessibility and pedagogical value. A planned survey of educators and heritage professionals, led by Éric Piette and Walter Crist, aims to guide the design of a layered system, offering both basic and advanced modes of interaction. The ultimate goal is to make *Ludii* a versatile educational and interpretive platform for traditional games.

2.2 Educational Materials

The second focus group of WG5 is the development of educational tools that combine historical depth with pedagogical effectiveness. To ground these tools in research-based practice, WG5 draws on two interrelated educational frameworks: gamification and game-based learning (GBL). While gamification refers to the use of game elements in non-game contexts to enhance motivation and engagement, GBL involves the use of complete games as structured learning environments. These models underpin the design of WG5's teaching materials, digital applications, and assessment tools.

Recent research shows that for gamification to be effective, it must follow sound design principles. Simple features driven by external rewards—such as points or badges—tend to have limited educational value unless they are embedded within meaningful learning experiences (Triantafyllou et al., 2025). Sailer and Homner (2020) demonstrate that gamification can significantly enhance cognitive, motivational, and behavioral outcomes when it includes narrative elements and encourages social interaction. Khaldi et al. (2023) similarly emphasize that well-designed gamification strategies are most effective when clearly aligned with educational objectives and structured for long-term learner engagement. GBL, by contrast, offers a more immersive and holistic educational experience by using complete games as structured

learning environments. Rather than simply adding game elements to non-game settings, GBL engages learners through the full design of a game, its rules, narrative, challenges, and goals, to support long-term knowledge retention, deeper conceptual understanding, and sustained motivation (DaCosta, 2025; Gaete et al., 2025; Gómez et al., 2022; Gui et al., 2023; Rojas-Barahona et al., 2022). Research shows that well-designed GBL environments stimulate learners not only cognitively, but also emotionally and socially, encouraging meaningful and lasting engagement with the material (Plass et al., 2015). A recent meta-analysis of early childhood education further confirms the wide-ranging benefits of GBL, demonstrating improvements in areas such as intellectual development, emotional growth, and collaborative skills (Alotaibi, 2024). In addition, studies comparing GBL with conventional instruction have found that serious games can lead to better learning outcomes and improved retention—especially when they involve interactivity and decision-making opportunities (Wouters et al., 2013).

Building on this theoretical foundation, WG5's educational strategy is also informed by the concept of game literacy, a form of critical media literacy that involves both technical and interpretive engagement with games. Game literacy positions games as semiotic domains in which rules, mechanics, and narratives encode culturally meaningful values and assumptions (Buckingham & Burn, 2007; Gee, 2003). Thus, understanding a game requires not only knowing how to play but also interpreting how it reflects historical contexts, models decision-making, and conveys symbolic meaning. In this sense, games function as cultural texts akin to literature or film.

Drawing on members' extensive experience in both primary and higher education, WG5 is creating resources that support teachers and learners in engaging with traditional games through structured, evidence-based approaches. These outputs aim to foster not only content acquisition but also reflective and culturally responsive forms of learning. WG5's pedagogical tools, such as teacher booklets, glossaries, AI-driven educational games, and assessment rubrics, are explicitly designed to cultivate this dual literacy, helping learners decode, critique, and reimagine historical games within broader social frameworks.

Among the key outputs are instructional booklets for teachers and future educators, introducing GBL strategies embedded in historical content. These materials are designed to promote collaborative learning, critical thinking, and cultural awareness in both formal and informal educational contexts. To enhance interdisciplinary clarity, a glossary of gamification and educational terms is also in development, coordinated by Dorela Konomi (Albania) and Mike Cosgrave (Ireland). The glossary aims to bridge terminological gaps among educators, researchers, and designers working across diverse disciplinary traditions.

One of WG5's most innovative initiatives is an AI-driven, text-based adventure game designed to train teachers in the pedagogical applications of AI and game design. This game features interactive narrative structures, branching decision-making paths, and adaptive learning mechanics, serving as both a professional development tool and a demonstration of AI-integrated pedagogy. Complementing these efforts, WG5 is also developing assessment rubrics tailored to measure student engagement and learning outcomes in game-based educational settings.

To expand its theoretical and practical scope, WG5 has initiated a pilot study on tabletop game-based literacy, led by Eleni Meletiadou (United Kingdom) and collaborators from multiple institutions. This study investigates the educational use of analog games, such as Playmobil and Lego-based activities, as tools for multimodal learning. These resources aim not only to enrich classroom practice but also to contribute to broader academic discourse on play-based pedagogy, multimodal literacy, and game-informed education.

Grounded in established educational theory and culturally informed practice, WG5's outputs are designed to be both pedagogically sound and adaptable. The tools developed aim to accommodate a range of teaching contexts while promoting inclusive education, critical reflection, and meaningful engagement with cultural heritage.

2.3 Digital Exhibition

The third focus group focuses on the creation of a digital exhibition to showcase the research, reconstructions, and interpretations generated across the GameTable network. Rather than a traditional, static exhibit, this initiative aims to be interactive, multimedia-rich, and participatory. Based on initial brainstorming in Santorini, the group decided to prioritize an online exhibition format with potential for adaptation into Virtual Reality, physical displays, or hybrid events in museums or archaeological parks.

The exhibition will feature thematic clusters based on:

- The cultural networks and transmission of games across time and space
- The epistemological dimensions of play (e.g., chance, strategy, game theory)
- The humanistic meaning of games (e.g., identity, symbolism, AI vs. human agency)

Content types will include videos, images, PDFs, reconstructions, and embedded games—presented via an interactive interface such as a map, timeline, or gamified website. Additionally, a citizen science component is planned to gather local variants, gameplay memories, and socio-cultural data through user submissions.

This visionary approach is grounded in evolving theories of participatory digital heritage and interactive museology (Münster et al., 2024). Scholars have emphasized the shift from passive consumption to active engagement in heritage interpretation. Digital exhibitions, for instance, are seen as opportunities to transform museums into participatory platforms that invite users to contribute memories, interpretations, and personal knowledge (Simon, 2010). Immersive environments such as virtual reality and 3D reconstructions are similarly valued for their ability to foster embodied and affective forms of engagement, deepening users' connection with cultural content (Kenderdine, 2015). Research on tangible-digital hybrids has also shown how co-designed tools can enhance interaction and support public involvement in meaning-making processes (Schou & Sundnes Løvlie, 2020).

Building on these frameworks, WG5 explicitly incorporates co-creative, participatory strategies within its exhibition design. Participatory heritage approaches must go beyond consultation to empower stakeholders in shaping the production and stewardship of heritage knowledge (Idrisi et al., 2021). Within the GameTable context, this is exemplified by the integration of citizen science tools that invite visitors to contribute local game knowledge, digital artifacts, and memory-based storytelling. These elements foster shared historical authority and support a shift from hierarchical narratives to distributed and plural interpretations of cultural heritage.

Together, the three WG5 focus groups: education, digital exhibition, and general game system, form the operational backbone of the working group, translating GameTable interdisciplinary research goals into tangible outputs. Their structure promotes synergies across archaeology, computer science, education, and public engagement, ensuring that innovative practices such as AI-driven interpretation, mathematical modeling, and game reconstruction are accessible and meaningful to diverse audiences.

3 Strategic Implementation: Highlights from Santorini and Rome

WG5's development between the Santorini (October 2024) and Rome (March 2025) meetings reflects a clear shift from exploratory reflection to implementation planning. These two gatherings provided essential platforms for refining the group's focus, coordinating with other working groups, and aligning its outputs with the wider aims of the GameTable Action.

3.1 Santorini: Foundation and Focus

The first in-person meeting in Santorini laid the groundwork for structured collaboration. Presentations on AI and computer science education, mathematics pedagogy, GBL design, and heritage gaming initiatives showcased the interdisciplinary potential of game-based approaches and highlighted communication challenges.

Notable highlights included:

- The Palamedes project, presented by Véronique Dasen (Switzerland), envisioning a dual-format Handbook of Play and Games in Classical Antiquity (print + multimedia, museum-oriented). The project has since evolved into a subproject of WG5, aligning closely with its aims in public heritage dissemination and educational outreach. A series of webinars focused on the *Palamedes* themes will be launched in the fall 2025, further integrating research, public engagement, and museum collaboration.
- The PAST project (Marco Tibaldini, Italy), offering downloadable modules on historical gaming practices.
- The innovative Graffiti in the Shadow of the Acropolis project (Barbara Carè, Switzerland), exploring gaming contexts through urban inscriptions and proposing an image-based pattern recognition tool for identifying board games.

3.2 Rome: Coordination, Collaboration, Visibility

The WG5 meeting in Rome marked a shift from conceptual development to coordinated action, with a strong emphasis on integration across working groups and preparation for public-facing activities. Several key initiatives advanced during this meeting. WG1 and WG5 formalized collaboration on playtesting AI-based historical game reconstructions, while proposals for a mobile educational app and a modular media kit for *Palamedes* added new momentum to digital outreach efforts. Progress continued on the glossary of gamification and educational terms, and plans for the WG5 teacher booklet on GBL and gamification (Gerda Sula et al.) were revisited and refined. In addition, a discussion covered an AI-powered

tool using a collaborative dataset to recognize traditional games (Piette et al., 2025).

In parallel, a coordinated dissemination strategy was devised to enhance the visibility and uptake of WG5's outputs. This includes aligning educational tools with communication goals, integrating media assets across platforms, and planning outreach activities directed at both educators and the broader public. By consolidating efforts across working groups and anticipating diverse audiences, the Rome meeting laid the groundwork for a coherent and impactful communication framework.

4 Dissemination Strategy and Public Engagement

WG5, tasked with leading implementation and outreach within the GameTable network, has developed a multifaceted dissemination and public engagement strategy that balances academic communication with broader societal interaction. Its aim is to share research outputs, digital tools, and educational resources with a wide array of stakeholders, including educators, museum professionals, heritage organizations, policy makers, and the general public.

Scholarly visibility remains a key component. WG5 members participate in leading interdisciplinary conferences in archaeology, digital heritage, and education, such as CAA (Computer Applications and Quantitative Methods in Archaeology), EAA (European Association of Archaeologists), and ECER (European Conference on Educational Research). These venues support knowledge exchange and foster cross-sector collaborations essential to integrating research into both academic and applied domains.

Beyond academia, WG5 places strong emphasis on outreach through cultural and public platforms. Participation in events such as the TOCATI Festival of Traditional Games in Verona enables direct engagement with heritage communities and general audiences. To support local communication efforts across Europe, a modular press and media toolkit is in development. This adaptable package, comprising templates, messaging guidelines, visual assets, and sample quotes—will help project partners present GameTable's goals and achievements in a coherent yet locally meaningful way. A parallel digital strategy includes a podcast series, a regularly updated blog, and curated social media campaigns. These platforms provide informal channels for reflection, storytelling, and engagement, especially among younger audiences, and will highlight case studies, interviews, and event reports.

Capacity-building is another core priority for WG5. A hands-on training school is currently being developed, with modules on GBL, heritage communication, and the Ludii system. It is designed to equip educators, graduate students, and cultural professionals with the practical skills needed to integrate traditional games into educational and interpretive settings.

To ensure quality and consistency, WG5 is establishing an internal peer-review process. This mechanism aligns terminology, supports the group's interdisciplinary pedagogical approach, and readies tools and publications for wider dissemination.

Participation is central to WG5's engagement model. The digital exhibition, developed by the dedicated focus group, integrates a citizen science layer that invites users to contribute memories, images, and contextual information on local game traditions. Structured prompts guide reflection on geography, practice, and intergenerational transmission. These user contributions will complement curated content and be presented through interactive maps, timelines, and exploratory interfaces, including potential gamified environments.

In parallel, WG5 is designing a pan-European tournament based on the Ludii game platform. Targeting school and university communities, the competition promotes game literacy, cultural heritage, and critical thinking through strategic play. A rotating selection of historically rooted and culturally diverse games will be accompanied by educational materials, enabling integration into classroom settings. The tournament's structure allows for national and regional rounds culminating in an in-person final, potentially in a symbolically rich location such as Pompeii. WG5 also envisions travel support to ensure inclusive participation.

These initiatives are conceived with adaptability and long-term impact in mind. Their modular formats allow for deployment in schools, museums, and public events, and they hold potential for integration into formal heritage curricula. The emphasis on user contribution and co-creation underscores WG5's commitment to transforming heritage audiences into active participants.

Looking ahead, WG5 is shaping the final conference of the Action as a multidimensional event in Brussels, combining scholarly presentations, public-facing workshops, and interactive showcases of GameTable tools. A highlight may include the final stage of the Ludii tournament, reinforcing the link between research, education, and public celebration.

To extend the Action's legacy, WG5 is exploring an online hub for educational materials, Ludii assets, and training content, alongside partnerships with teacher education programs and digital heritage platforms. The envisioned European

Game Heritage Network will further sustain interdisciplinary collaboration and advocacy for the study and use of traditional games. Ultimately, WG5 promotes a participatory, digitally enriched, and pedagogically grounded model of cultural heritage dissemination, one that positions play as a bridge between past and present, scholarship and society.

5 Conclusion

The work of WG5 within the GameTable COST Action reflects a vital and timely convergence of cultural heritage, digital innovation, and educational outreach. By focusing on implementation, dissemination, and education, WG5 plays a unique role in ensuring that the Action's research into traditional tabletop games is not only preserved and studied but also activated, brought into classrooms, museums, and public discourse through participatory and pedagogically grounded practices.

From the initial meeting in Santorini to coordination sessions in Rome, WG5 has developed a robust agenda supported by three interlinked focus groups. Together, they have produced diverse outputs: digital exhibitions, teacher booklets, glossaries, AI-driven educational games, school tournaments, and evaluation tools. WG5 has also established a clear strategy to engage academic and public audiences via conferences, social media, citizen science, and training schools.

What emerges from this work is a model for public heritage scholarship that is not merely about communicating research, but about co-creating knowledge with learners, educators, and communities. By embracing the affordances of digital tools, the Ludii platform, and playful pedagogy, WG5 contributes to a broader reimagining of how we teach, interpret, and experience the history of games.

As GameTable approaches its final phase, WG5 is well positioned to shape the network's legacy and long-term impact, through a final conference and sustained partnerships. Its vision offers a compelling example of how interdisciplinary collaboration can turn heritage research into educational practice, public dialogue, and collective imagination.

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References

- Alotaibi, M. S. (2024). Game-based learning in early childhood education: A systematic review and meta-analysis. *Frontiers in Psychology, 15*, 11018941. <https://doi.org/10.3389/fpsyg.2024.11018941>
- Begy, J. (2015). Board games and the construction of cultural memory. *Games and Culture, 12*(7-8), 718–738. <https://doi.org/10.1177/1555412015600066> (Original work published 2017).
- Browne, C. (2020). AI for ancient games: Report on the Digital Ludeme Project. *KI-Kunstliche Intelligenz, 34*, 89–93. <https://doi.org/10.1007/s13218-019-00600-6>
- Buckingham, D., & Burn, A. (2007). Game literacy in theory and practice. *Journal of Educational Multimedia and Hypermedia, 16*(3), 323–349. <https://andrewburn.org/wp-content/uploads/2014/04/buckingham-burn-game-literacy.pdf>
- Caselli, S. (2021). Playing sites of memory: Framing the representation of cultural memory in digital games. *Journal of Digital Media & Interaction, 4*(11), 42–59. <https://doi.org/10.34624/jdmi.v4i11.26482>
- COST. (2023). *Memorandum of understanding for the implementation of the COST action “computational techniques for tabletop games heritage” (CA22145)* (MoU No. 055/23). COST Association. <https://www.cost.eu/actions/CA22145/>
- Crist, W., Piette, É., & Browne, C. (forthcoming). Playing the games of the past: Digital tools for resurrecting traditional board games. In A. Mol, A. Politopoulos, & C. Gerritsen (Eds.), *The Interactive Pasts Conference 3 proceedings*. Sidestone Press. In preparation.
- Crist, W., Piette, E., Soemers, D. J. N. J., Stephenson, M., & Browne, C. (2024a). Computational approaches for recognising and reconstructing ancient games: The case of Ludus Latrunculorum. In V. Dasen & M. Vespa (Eds.), *The archaeology of play: Material approaches to games and gaming in the Ancient World* (pp. 63–80). Oxbow.

- Crist, W., & Soemers, D. J. N. J. (2023). The Digital Ludeme Project: Combining archaeological and computational methods for the study of ancient board games. *Journal of Archaeological Science: Reports*, 49, 104005. <https://doi.org/10.1016/j.jasrep.2023.104005>
- Crist, W., Stephenson, M., Piette, É., & Browne, C. (2024b). The Ludii games database: A resource for computational and cultural research on traditional board games. *Digital Humanities Quarterly*, 18, 4. <https://digitalhumanities.org/dhq/vol/18/4/000756/000756.html>
- DaCosta, B. (2025). Generative AI meets adventure: Elevating text-based games for engaging language learning experiences. *Open Journal of Social Sciences*, 13(4), 601–644. <https://doi.org/10.4236/jss.2025.134035>
- Gaete, J., Ramírez, S., Rojas-Barahona, C. A., Romo, V., Ríos, N., & Araya, R. (2025). Japi 2.0, a gaming platform to stimulate cognitive and non-cognitive skills in early childhood: Protocol for a pilot randomized controlled trial. *Pilot and Feasibility Studies*, 11(1), 5. <https://doi.org/10.1186/s40814-025-01593-w>
- Gee, J. P. (2003). What video games have to teach us about learning and literacy. *Computers in Entertainment*, 1(1), 20. <https://doi.org/10.1145/950566.950595>
- Gómez, M. J., Ruipérez-Valiente, J. A., & García Clemente, F. J. (2022). A systematic literature review of game-based assessment studies: Trends and challenges. *arXiv*. <https://doi.org/10.48550/arXiv.2207.07369>
- Gui, Y., Cai, Z., Yang, Y., Zhang, D., & Li, H. (2023). Effectiveness of digital educational game and game design in STEM learning: A meta-analytic review. *International Journal of STEM Education*, 10(1), Article 36. <https://doi.org/10.1186/s40594-023-00424-9>
- Idrisi, M. A., Yilmaz, A., & Çağlar, E. (2021). From public participation to co-creation in the cultural heritage management decision-making process. *Sustainability*, 13(16), 9321. <https://doi.org/10.3390/su13169321>
- Kenderdine, S. (2015). Embodiment, entanglement, and immersion in digital cultural heritage. In S. Schreibman, R. Siemens, & J. Unsworth (Eds.), *A new companion to digital humanities*. <https://doi.org/10.1002/9781118680605.ch2>
- Khalidi, A., Bouzidi, R., & Nader, F. (2023). Gamification of e-learning in higher education: A systematic literature review. *Smart Learning Environments*, 10(1), 10. <https://doi.org/10.1186/s40561-023-00227-z>
- Liu, W., & Nie, X. (2023). Cultural heritage game design based on the collective memory reconstruction model. *SHS Web of Conferences*, 167, 02004. <https://doi.org/10.1051/shsconf/202316702004>
- M. Mochocki (Ed.). (2023). *Heritage, memory and identity in postcolonial board games* (1st ed.). Routledge. <https://doi.org/10.4324/9781003356318>
- Münster, S., Maiwald, F., di Lenardo, I., Henriksson, J., Isaac, A., Graf, M. M., Beck, C., & Oomen, J. (2024). Artificial intelligence for digital heritage innovation: Setting up a R&D agenda for Europe. *Heritage*, 7(2), 794–816. <https://doi.org/10.3390/heritage7020038>
- Piette, É., Crist, W., Soemers, D. J. N. J., Rougetet, L., Courts, S., Penn, T., & Morenville, A. (2024). GameTable COST Action: Kickoff report. *ICGA Journal*, 46, 1–17.
- Piette, É., Morenville, A., Care, B., Moullou, D., & Crist, W. (2025). AI-powered game recognition: A collaborative dataset for traditional games, computer applications and quantitative methods in archaeology (CAA).
- Piette, É., Rougetet, L., Crist, W., Stephenson, M., Soemers, D. J. N. J., & Browne, C. (2021). A Ludii analysis of the French Military Game. *Board Game Studies (BGS)*.
- Piette, É., Soemers, D. J. N. J., Stephenson, M., Sironi, C. F., Winands, M. H. M., & Browne, C. (2020). Ludii – The Ludemic general game system. In G. D. Giacomo, A. Catala, B. Dilkina, M. Milano, S. Barro, A. Bugarín, & J. Lang (Eds.), *Proceedings of the 24th European conference on artificial intelligence (ECAI 2020)*. *Frontiers in artificial intelligence and applications* (Vol. 325, pp. 411–418). IOS Press.
- Plass, J. L., Homer, B. D., & Kinzer, C. K. (2015). Foundations of game-based learning. *Educational Psychologist*, 50(4), 258–283. <https://doi.org/10.1080/00461520.2015.1122533>
- Rojas-Barahona, C. A., Gaete, J., Véliz, M., Castillo, R. D., Ramírez, S., & Araya, R. (2022). The effectiveness of a tablet-based video game that stimulates cognitive, emotional, and social skills in developing academic skills among preschoolers: Study protocol for a randomized controlled trial. *Trials*, 23, 936. <https://doi.org/10.1186/s13063-022-06875-9>
- Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review*, 32(1), 77–112. <https://doi.org/10.1007/s10648-019-09498-w>
- Schou, M. M., & Sundnes Løvlie, A. (2020). The diary of Niels: Affective engagement through tangible interaction with museum artifacts. *arXiv*. <https://doi.org/10.48550/arXiv.2011.1137>
- Simon, N. (2010). *The participatory museum*. Museum 2.0.
- Stephenson, M., Piette, E., & Browne, C. (2019). Teaching and learning with LUDII. *Board Game Studies (BGS)*.
- Triantafyllou, S. A., Georgiadis, C., & Sapounidis, T. (2025). Gamification in education and training: A literature review. *International Review of Education*, 71, 483–517. <https://doi.org/10.1007/s11159-024-10111-8>
- Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der Spek, E. D. (2013). A meta-analysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, 105(2), 249–265. <https://doi.org/10.1037/a0031311>