# About the 19th European Conference on Games-Based Learning, 2025

The European Conference on Games-Based Learning (ECGBL) is a well-established academic conference, held annually since 2007, that serves as a hub for scholars, educators, and practitioners interested in the design, development, and application of games and gamification in education and training. The conference proceedings are published each year, contributing significantly to the research on how games can foster learning, engagement, and motivation across diverse educational settings.

ECGBL has been instrumental in advancing research on how games can transform education, offering a space for interdisciplinary collaboration between academics, game designers, and educators. It has significantly contributed to the understanding of how games can support learning in a variety of contexts and for diverse learner groups. By publishing its proceedings annually, the conference disseminates state-of-the-art research, case studies, and theoretical discussions that help shape the future of games-based learning. The conference is recognized for encouraging innovation in education and for highlighting the potential of games to engage learners, enhance motivation, and improve learning outcomes across all age groups and educational sectors.

The Proceedings of the 19<sup>th</sup> European Conference on Games-Based Learning, 2025 includes academic research papers, PhD research papers, Masters Research papers and work-in-progress papers which have been presented and discussed at the ECGBL 2025 conference. The proceedings are of an academic level appropriate to a professional research audience including graduates, post-graduates, doctoral and post-doctoral researchers. All papers have been double-blind peer reviewed by members of the Review committee.

#### Aims and Scope

ECGBL focuses on the intersection of games, technology, and education, aiming to advance knowledge and innovation in the field. The scope is comprehensive, addressing both the theoretical foundations and practical applications of games in various learning environments, and offering a venue for discussing new challenges and future directions in games-based learning.

#### **Topics Covered**

The call for papers for the ECGBL conference asked for contributions that considered the following topics. In addition, the committee welcomed papers to a number of specialist mini-tracks which can be seen at the end of this list.

#### **Games-Based Learning (GBL) Theories and Models**

- Exploration of theoretical frameworks underpinning games-based learning.
- Models that explain how and why games enhance learning.
- Cognitive and motivational theories related to gameplay and learning outcomes.
- The role of experiential learning and constructivism in game-based environments.

### **Game Design for Education**

- Best practices in the design and development of educational games.
- Principles of gamification and how they can be applied to non-game contexts.

- User experience (UX) and user interface (UI) considerations for educational games.
- Collaboration between game designers, educators, and subject matter experts.

#### **Serious Games for Skill Development**

- Use of serious games to teach complex skills such as problem-solving, critical thinking, and teamwork.
- Case studies of games developed for professional training, including sectors like healthcare, military, and business.
- Games for soft skills development, including communication, empathy, and leadership.
- Assessing the effectiveness of games for skill acquisition and retention.

### **Gamification in Learning**

- Application of gamification techniques to enhance motivation in traditional learning environments.
- Analysis of reward systems, leaderboards, badges, and progression mechanics.
- Gamification in corporate training and adult education.
- Balancing gamification elements with educational objectives.

#### **Assessment and Evaluation in Games-Based Learning**

- Methods for assessing learning outcomes in game-based learning environments.
- Use of analytics to measure engagement, progress, and knowledge retention in games.
- Adaptive learning and personalization through games.
- Challenges in standardizing assessment methods for GBL.

### **Games for Social and Emotional Learning**

- Role of games in developing social-emotional skills, including empathy, resilience, and cooperation.
- Multiplayer and collaborative games that foster teamwork and communication.
- Addressing bullying, inclusion, and diversity through games.
- Games designed to build emotional intelligence and self-regulation.

# **Technology and Innovation in Games-Based Learning**

- Emerging technologies in game-based learning, such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI).
- Use of mobile and tablet games for education.
- Integration of interactive simulations and immersive experiences in learning.
- Exploring the potential of mixed reality and Al-driven adaptive learning systems.

### **Games for Specific Learner Groups**

- Games designed for early childhood education and primary school students.
- GBL approaches for secondary and higher education.
- Accessibility considerations for learners with special needs.
- Games tailored to adult learners and lifelong learning contexts.

#### **Games-Based Learning in Formal and Informal Settings**

- The role of games in formal education environments, including schools and universities.
- Use of games in informal and non-traditional learning settings, such as museums, libraries, and after-school programs.
- Community-driven game-based learning initiatives.
- Games for public awareness campaigns and societal impact.

## **Cultural and Ethical Aspects of Games-Based Learning**

- Exploration of cultural contexts and their impact on game-based learning design and reception.
- Ethical considerations in the use of games for education.
- Addressing biases, stereotypes, and representation in educational games.
- Discussion of privacy, data security, and the digital well-being of learners in gamebased environments.

Experts in the field proposed mini tracks on the following topics. Papers accepted to these tracks after the double-blind peer review process were presented as mini tracks at the conference and are also published in these proceedings.

- Citizen Science Games
- Games Promoting Critical Thinking, Scientific Communication and Literacy in STEM
- Educational Escape Rooms
- Game-based learning for lifelong learning
- Educational Non-Digital Games

Full details about the conference can be seen from the conference website: <a href="https://www.academic-conferences.org/conferences/ecgbl/">https://www.academic-conferences.org/conferences/ecgbl/</a>

# **ECGBL Editorial**

These proceedings represent the work of contributors to the 19th European Conference on Games Based Learning (ECGBL 2025), hosted by Nord University, Levanger, Norway 1-3 October 2025. The Conference Co-Chairs were Helga Dis Isfold Sigurdardottir and Robin Isfold Munkvold, both from Nord University, Norway.

ECGBL is now a well-established event on the academic research calendar and now in its 19<sup>th</sup> year the key aim remains the opportunity for participants to share ideas and meet the people who hold them. The scope of papers will ensure an interesting two days. The subjects covered illustrate the wide range of topics that fall into this important and ever-growing area of research.

The opening keynote presentation was given by Elin Festøy from Teknopilot speaking on "Game Development to Teach Mental Health Literacy and Best Practice Trauma Treatment". On Friday the conference began with a keynote address from Tim Lanning from Grendel Games, who spoke on the topic of Laptitude: Advancing Global Surgery Education & Training through good game design

With an initial submission of **233** abstracts, after the double-blind peer review process there are **104** Academic research papers, **8** PhD research papers, **6** master's Research papers, **5** Non-academic papers and **9** work-in-progress papers published in these Conference Proceedings. These papers represent research from Australia, Austria, Brazil, Canada, China, Colombia, Croatia, Denmark, England, Estonia, Finland, France, Germany, Greece, India, Indonesia, Iran, Ireland, Italy, Japan, Luxembourg, Malaysia, México, Norway, Poland, Portugal, Romania, Singapore, Slovakia, South Africa, Spain, Sweden, Switzerland, Thailand, the Netherlands, Tunisia, Türkiye, UK, and the USA.

We would like to thank everyone who participated in the conference.

Helga Dis Isfold Sigurdardottir and Robin Isfold Munkvold Nord University Norway October 2025

# **Biographies of Chairs and Keynote Speakers**

#### **Conference and Programme Chairs**



Helga Dis Isfold Sigurdardottir is a researcher at Nord University, focusing on digital game-based learning, video games, AI, online cultures, diversity, feminist theory, gender, mental health and career development. She has been an active ECGBL participant since 2011 and currently coordinates Work Package 3 (WP3) in the Neon Young Norway project, which develops social impact games and interactive media for young people's recovery narratives.Dr.Sigurdardottir

guides digital game development students in creating these media products, ensuring high-quality and ethical outputs. Her work bridges game development and mental health, advocating for inclusive and ethical digital media. Through her research, she contributes to the intersection of technology, diversity, and mental health, fostering collaborative, socially impactful projects



**Robin Isfold Munkvold** is a researcher and educator at Nord University with over a decade of involvement in the European Conference on Game-Based Learning (ECGBL) network. His research over the past 10-15 years has focused on enhancing the quality of technology programs in higher education, with specific expertise in gamification, game-based learning, and user experience (UX). Dr. Munkvold is also a key contributor to the Centre for Excellent IT Education

(Excited), a nationally funded center dedicated to advancing IT education, where he has served in a leadership role for eight years. In addition to his research, Dr. Munkvold holds a prominent position within Forskerforbundet (The Norwegian Association of Researchers) at Nord University, advocating for academic professionals across Norway. His work contributes significantly to educational innovation and academic advocacy, reinforcing his influence in both technology education and the broader academic community.

#### **Keynote Speakers**



**Tim Laning** is the CEO and co-owner of Grendel Games, an independent award winning serious game development company from Leeuwarden, The Netherlands. Grendel Games has been focused on creating games that drive behavior change for almost 25 years. The company is focused on three different sectors: healthcare, sustainability and education. From turning surgery training into a fun Nintendo game to using smart meters to generate levels for an infinite

runner, Tim and his company love turning education into fascination and learning into gaming. Tim is a celebrated speaker at conferences from GDC San Francisco to Indiecade LA, member of the board for the Dutch Game Garden Incubation Program and External Executive for Nord University.

### **Mini Track Chairs**



**Dr. Panagiotis Fotaris** is a Principal Lecturer at the University of Brighton, UK, specialising in Game Design, Narrative, and User Experience. His research explores the use of escape rooms, generative AI, and immersive technologies in higher education, with a focus on enhancing gamebased learning. Dr. Fotaris has authored over 40 publications, with more than 1,600 citations, and has led innovative projects on cybersecurity awareness and information literacy through

educational escape rooms.



**Sónia Pais,** PhD in Education, is an Associate Professor at the Polytechnic of Leiria. She is a researcher at CiTUR – Centre for Tourism Research, Development and Innovation. Her research interests are in educational sphere, including how best to teach math subjects. She has interest in Mathematical Education, Educational Technology, Pedagogical Innovation and Game Based Learning.



**Martin Sillaots** is an associate professor of serious games and the head of the master's programme for digital learning games at Tallinn University. Teacher of project management and project-based courses, a national coordinator of international projects and a manager of national projects. Strategic advisor of the European Parliament Role-Playing Games.

### **ECGBL 2025 Reviewer Committee**

ECGBL is fortunate to have a significant number of international experts in the field willing to review papers. Care is taken to ensure that a fully double-blind peer review process is followed, and reviewers are not selected if they have any research or organisational connection to the author/s.

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