15th European Conference on Games Based Learning - ECGBL 2021
23-24 September 2021 - A Virtual Conference Supported by The University of Brighton, UK
Conference runs to UK timings (GMT+1)

Wednesday 22 September 2021

09:00	Pre-Conference Workshop: Educational Escape Room Workshop (runs until 17:00)
14:00	Using Embodied Methods in Designing STEM Learning Games (runs until 17:00)
09:00	Presentations for The 9th International Educational Games Competition (see separate programme - runs until 15:30)

Thursday 23 September 2021

08:30	Zoom Room Opens
09:00	**Room 1:** Welcome and Opening of the Conference
09:15	Keynote presentation: Pete Jenkins, CEO of Gamification+ Ltd *Seven Steps to Gamification Success*
10:00	Conference splits into streams

	Room 1 Stream A - Mini Track on Dialogic Perspectives on Games and Learning Chair: Thorkild Hanghøj	Room 2 Stream B: Mini Track on Learning through educational game design. Chair - Charlotte Lærke Weitze	Room 3 Stream C - Virtual Reality Chair: Dominic Mahon	Room 4 Stream D: Serious Games Chair : Stefan Göbel
10:10	Digital Games, Dialogue and Learning: Exploring Research Perspectives Thorkild **Hanghøj**, Aalborg University, Copenhagen, Denmark, Kenneth **Silseth** and Hans Christian **Arnseth**, University of Oslo, Norway	Towards an Assessment Framework for Learner-Created Game Levels in Chemical Engineering Education Sílvia **Fornós and** Daniel **Cermak-Sassenrath**, IT University of Copenhagen, Denmark	Teaching History and Bringing the Past Back to Life with Serious Games Gavin **Baxter**, Thomas **Hainey**, Antea **Savorelli**, Umar **Akhtar** and Ralica **Ivanova**, University of the West of Scotland, Paisley, UK	Investigating the Effects of Social Gameplay Elements in Gamifying Online Classes. Chin Ike **Tan**, Choon Yee **Wong**, Aidora **Abdullah** and Julian Eng Kim **Lee**, UOW, Selengor, Malaysia
10:30	Toward a Game-Based Dialogical Pedagogy: Insights from Massively Multiplayer Online Role-playing Games Shangjun **Wang**, Karlene **Cousins**, Florida International University, USA and Sojen **Pradhan**, University of Technology Sydney, Australia,	Developing Reading Skills in EFL Through Adaptive Game-based Learning Roger **Gilabert**, Sara **Feijoo**, Judit **Serra**, University of Barcelona, Spain	VR is very Relevant 4 Kids: Business Modeling for Virtual Reality in Healthcare Arian **Merzaie**, Ton **Spil**, University of Twente, Jasmijn **Franke** and Monique **Tabak**, Roessingh Research and Development, Netherlands	Learners' User Experience Assessment of a Serious Game for Social Innovation Education Antonia **Schorer** and Aristidis **Protopsaltis**, Innovation in Learning Institute, Germany
10:50	The Joy of Rediscovering Chess: The Perspectives of Dialogic Thinking in Chess Malola Prasath Thittanimuttam **Sundaramadhavan**, Foundation for Learning Research in Chess, India, Luis **Blasco de la Cruz**, Astrid **Barbier,** Madrid Chess Academy, Sharon **Whatley**, Gibraltar Chess Association, Mustaffa **Megrahi**, Atlantis Training and Consultancy, UK	Learning Through Educational Game Design: A Systematic Literature Review Charlotte **Lærke Weitze**, Digital & Creative Learning Lab, Helsingør, Denmark	End-user Development of Virtual Simulations for Task Training: A Literature Review Tina Helene **Bunæs** and Joakim **Karlsen**, Østfold University College, Norway	Serious Games Focussing on Migration: Which Political Messages do they Convey? Sonja **Gabriel**, KPH Vienna/Krems, Vienna, Austria
11:10	Learning about Learning by Making Board Games: Dialogical Perspectives from L1 Teacher Education Stina **Thunberg**, Caroline **Graeske** and Märtha **Andersson**, Luleå University of Technology, Sweden (Presentation Only)	Fighting Viruses Though Escape Room Design with Students Luca **Botturi** and Masiar **Babazadeh**, Scuola Universitaria Professionale della Svizzera Italiana, Switzerland	Insights from Design Processes Used in Developing Exergames Alexander **Lund**, Amalie **Finnemann**, Lars **Elbaek** and Maximus **Kaos**, South Denmark University, Denmark	Using Serious Games to Train Students and Assess Language Skills: The Case of Subtitle Legends José Ramón **Calvo-Ferrer**, José **Belda-Medina** and Miguel **Tolosa Igualada**, University of Alicante, Spain (Presentation Only)
11:30	Learning about Learning by Making Board Games: Dialogical perspectives from L1 teacher education Stina **Thunberg**, Caroline **Graeske** and Märtha **Andersson**, Luleå University of Technology, Sweden (Presentation Only)	You Can't Escape Learning, but Maybe you can get out of the Room! Game-based Learning for Programming Education Niklas **Humble**, Peter **Mozelius** and Lisa **Sällvin**, Mid Sweden University, Sweden	An Open Workshop Enabling Arts Students and Educators to Collaboratively Construct Multi-User Worlds Manthos **Santorineos**, Stavroula **Zoi**, and Konstantina **Vetsiou**, Athens School of Fine Arts, Greece	Towards a Quality Label for Educational Games and Serious Games Julian **Conradt**, Tobias **Eckert**, Polona **Caserman**, Marcel **Schaub**, Regina **Bruder** and Stefan **Göbel,** TU Darmstadt, Germany
11:50	Playing and Reflecting Games: The Production of Gamified Learning Artefacts in Teacher Education Daniel **Handle-Pfeiffer** and Christoph **Winter**, University of Vienna, Austria	Privacy Awareness by Co-Design: Investigating Reflection and Learning Qualities of Card-educational Game Creation Patrick **Jost**, Norwegian University of Science and Technology, Trondheim, Norway	Cumbraecraft: A Virtual Environment for Teaching Cultural Heritage to Primary Schoolchildren Kayleigh **MacLeod**, Andrew **Reid**, Iain **Donald**, Abertay University, Scotland and Kasia **Smith**, Millport Conservation Area Regeneration Scheme, UK	Development of an Instrument to Analyse Gameplay Features Promoting Complex Problem-Solving Conditions Dimitar **Gyaurov**, Andrea **Bottino**, Politecnico di Torino, Italy and Carlo **Fabricatore**, E.H.E. Europa Hochschule
12:10	*Lunch Break*	*Lunch Break*	*Lunch Break*	*Lunch Break*

Time	Room 1 Stream A: Movement and Board Games Chair: Alex Ball	Room 2 Stream B: Mini Track on Learning through educational game design. Chair - Charlotte Lærke Weitze	Room: 3 Stream C - GBL Issues Chair - Francesco Strada	Room: 4 Stream D - GBL Issues Chair - Gavin Baxter	Room 5 Stream E - PhD and Masters Colloquium Chairs - Cathy Grundy & Marcus Winter
13:00	Methods for Design 'with' Movement: A Systematic Literature Review Maximilan **Hille**, Nadia **Boujari** and Kristina **Bilkova**, Copenhagen Business School and Md Saifuddin **Khalid**, Technical University of Denmark, Denmark	Promoting Environmental Education with Escape Room Activities: Critical Factors for Implementation Gisela **Mello**, Jessica **Reuter**, Marta Ferreira **Dias** and Marlene **Amorim**, GOVCOPP, DEGEIT, University of Aveiro, Portugal	Some Killer Feedback: A Case Study on Volunteering as Playtesters and Player Typologies Joachim **Majors** and Matilda **Ståhl**, Åbo Akademi University, Finland	Assessing Serious Games within Purchasing and Supply Management Education: An In-class Experiment Vincent **Delke**, Holger **Schiele**, University of Twente, Netherlands and Wolfgang **Buchholz**, Münster University of Applied Sciences, Germany	Improving a New Design Tool to Inform Serious Game Behaviour Change Interventions Karen **Shanks**, David **Farrell**, Mike **Mannion**, Julie **Campbell** and Karen **Thomson**, Glasgow Caledonian University, Scotland Didactic Planning of VR Alcohol Resistance Training Tool for Adolescents Patricia **Lyk** and Gunvar **Majgaard**, Univeristy of Southern Denmark, Odense, Denmark
13:20	Computer Science Unplugged: Developing and Evaluating a "Traveling Salesperson Problem" Board Game Mareike **Nutz** and Luzia **Leifheit**, Universtity of Tübingen, Germany	Design Considerations for Developing a Game-based Learning Resource for Cyber Security Education Chitra **Balakrishna**, Open University, Milton Keynes, UK	Gamification of the Middle Ages: Educational Dimension of the User Modifications of "Total War: Medieval II" Anton **Sukhov**, Ural Federal University named after the first President of Russia B. N. Yeltsin, Ekaterinburg,	Can Digital Games Improve Critical Information Literacy? Sonja **Gabriel**, KPH Vienna/Krems, Austria	Exploring the Impact of Perspective-taking Game Design Techniques in a Different Context Henrique **Gil**, Mike **Mannion**, Caroline **Parker** and Romana **Ramzan**, Glasgow Caledonian University, UK
13:40	Designing an Educational Board Game "Story of Court" forTraining Chinese Reading Comprehension: Analysis of Learning Effects, Flow, Acceptance and Anxiety Jyun-Yi **Ji**, Yu-Chi **Chen** and Chih-Chen **Kuo** and Huei-Tse **Hou**, National Taiwan University of Science and Technology, Taiwan	Ingrating Game-based Learning for Intercultural Skills Development in Higher Education Marta **Fondo**, Universitat Oberta de Catalunya, Barcelona and Pilar **Gómez-Rey**, Universidad Loyola Andalucía, Spain	Prototypical Implementation of an Applied Game with a Game-Based Learning Framework Ramona **Srbecky**, Manfred **Krapf**, Benjamin **Wallenborn**, Matthias **Then** and Matthias **Hemmje**, Fernuniversität Hagen, Germany	The Science Behind the Art of Engaging: Support in Games and Coding Bernadette **Spieler**, Zurich University of Teacher Education, Switzerland	Bridging Emotional Design and Serious Games: Towards Affective Learning Design Patterns Gabriel C. **Natucci** and Marcos Augusto Francisco **Borges**, University of Campinas, Limeira, Brazil
14:00	Development and Evaluation of an Educational Board Game "118 Job Bank" for Human Resource Training Courses Pei Ying **Zuo**, Ying Sang **Fang** and Chih-Chen **Kuo**, Hsin-Ta **Lin** and Huei-Tse **Hou**, National Taiwan University of Science and Technology, Taiwan	Supporting Teachers in Adopting Game-based Learning in Formal Education: A Systematic Literature Review Mohammad **Assaf**, Ton **Spil** and Guido **Bruinsma**, University of Twente, Netherlands	StreamIT! Towards an Educational Concept Centered Around Gameplay Video Production Natalie **Denk**,Thomas **Wernbacher**, Danube University Krems, Barbara **Göbl**, Suzanna **Jovicic** and Simone **Kriglstein**, University of Vienna, Austria	Realization of a Framework for Game-based Learning Units Using a Unity Environment Ramona **Srbecky**, Manfred **Krapf**, Matthias **Then**, Benjamin **Wallenborn** and Matthias **Hemmje**, Fernuniversität Hagen, Germany	Teacher's Contemplation Towards Selecting and Evaluating Games for Classroom Mifrah **Ahmad**, Deakin University, Melbourne, Australia Single Player Digital Games: Hegemonical, Dialogical or Critical Agents in Identity Formation Mike **Hyslop Graham**, IT University of Copenhagen, Denmark
14:20	The Development and Preliminary Evaluation of a Chinese Painting and Calligraphy Board Game with Situated Learning Chih-Chen **Kuo**, Ying Sang **Fang** and Huei-Tse **Hou**, National Taiwan University of Science and Technology, Taiwan	Using Kahoot! to Enhance the Motivation of Undergraduate Tourism Students in Mathmatics Classes: A Case Study Sónia **Pais**, Politécnico de Leiria and Andreia **Hall**, University of Aveiro, Portugal	Systematic Extension of a Simulation Game for Digitalised Production Henry **Himmelstoß**, Simon **Rapp**, Ozan **Yesilyurt** and Andreas **Bildstein**, Fraunhofer IPA, Stuttgart, Germany	Children's Metacognitive Comprehension of Video Games as Multimodal Texts Sam **von Gillern**, University of Missouri, Columbia, MO and Carolyn **Stufft**, Berry College, USA (Presentation Only)	Online Design Facilitation During COVID-19: Recommendations for Future Virtual Sports Innovation Camps Philip **Wolfgang**, Lærke Schjødt **Rasmussen**, Johannes **Di Biaso** and Lars **Elbæk**, University of Southern Denmark, Denmark (Masters)
14:40	*Break*	*Break*	*Break*	*Break*	*Break*
	Room 1 Stream A: Design Issues Chair: Marco Gilardi	Room 2 Stream B: Mini Track on Learning through educational game design. Chair - Charlotte Lærke Weitze	Room 3 Stream C: Role Play Chair: Christos Malliarakis	Room 4 - Wellbeing Stream D: Chair: Anton Sukhov	Room 5 Stream E - PhD and Masters Colloquium Chairs - Cathy Grundy & Marcus Winter
15:00	A Skill Tree Method to Identify and Map In-game Skills to Out-of-game Contexts Per **Backlund**, Patrik **Erlandsson** and Jimmy **Andersson**, University of Skövde, Sweden	Run and Solve the Case! Case Studies With Game Based Learning Sandra Miranda **Leal**, Tecnológico de Monterrey, Morelia, México	Heutagogy as Narrative: Role-Playing Learning Design for Computer Science Teaching & Learning Lance **Bunt**, North-West University, Vanderbijlpark, South Africa	Application of the Octalysis Framework to Gamification Designs for the Elderly. Carolin **Gellner**, Ilona **Buchem** and Jana **Müller**, Beuth University of Applied Sciences, Germany	"This is My Story": A Serious Game for Independent Living Skills in Special Education Stavros **Tsikinas** and Stelios **Xinogalos**, University of Macedonia Using Game Based Learning Elements in Practice Enterprises for Entrepreneurial Education Mihaela **Moca**, University of Oradea, Romania
15:20	Comparing Design-Based and Agile Methodologies in Educational Game Development Osvaldo **JImenez**, University of the Pacific, Stockton and Dennis **Ramirez**, Twin Cities PBS, USA	Room2Educ8: A Conceptual Framework for Designing Educational Escape Rooms Panagiotis **Fotaris**, University of Brighton, UK and Theodoros **Mastoras**, University of Macedonia, Greece (Presentation only)	Using Dilemmas to Make Important Decisions: Analysing Situations Based on the Covid Pandemic Daria **Shalina**, Natalia **Stepanova**, Viola **Larionova**, Ural Federal University, Russia, Azeddine **Bouziane**, University of Bechar, Algeria, Nana **Incirveli**, Tbilisi State Art Academy, Georgia and Ken **Brown**, Letterkenny Institute of Technology, Ireland	GBL for Psychological Intervention Related Skills: What Challenges? What Paths? Carla **Sousa**, Micaela **Fonseca**, Shivani **Mansuklal**, Jéssica **Carvalho**, HEI-Lab, Lusófona University, Portugal	Identifying the Lack of Immersive Games in Higher Level Mathematics Game-based Learning Evgenia **Anagnostopoulou**, University of Sussex, Brighton, UK Teachers Designing Lessons with a Digital Sandbox Game: The Case of Minecraft Education Edition David **Bar-El**, Northwestern University, Evanston, and Kathryn Ringland, University of California Santa Cruz, USA
15:40	Design-based Research on a Cooperative Educational VR Game about Ohm's Law Regina **Frieß**, Tamara **Voigt**, Florian **Gnadlinger**, Christoph **Holtmann** and Martin **Steinicke**, University of Applied Sciences Berlin (HTW Berlin), Germany	A Systematic Review of using Reflective Design Features in Game-based Learning: Anjuman **Shaheen**, Panagiotis **Fotaris**, Marcus **Winter** and Sanaz **Fallahkhair**, University of Brighton, UK	Integrating Learning Content into an Educational Game Narrative: An Empirical Investigation of Technical Factors Pratama **Atmaja** and Sugiarto **Sugiarto**, University of Pembangunan Nasional "Veteran" Jawa Timur, Indonesia	MountainQuest: Designing an Action/Adventure Game to Teach Children About Nutrition Dmitriy **Babichenko**, Patrick **Healy** and Cynthia **Danford**, University of Pittsburgh, USA	Facing your Fears: Design of a VR Tool for Usage within Exposure Therapy for Patients with Social Anxiety Disorders Combined with Selected Game-based Elements Asge Frederik **Matthiesen**, Mærsk McKinney Møller Institute and Lasse Juel **Larsen**, Institut for Kulturvidenskaber, Odense Denmark
16:00	How Insights into Commercial Games can Improve the Design of Educational Games on Complex Societal Problems André **Czauderna**, Emmanuel **Guardiola**, TH Köln, Joelle-Denise **Lux** and Alexandra **Budke**, University of Cologne, Germany	So, Why DO Students Perform Better in Gamified Courses? Understanding Motivational Styles in Educational Gamification Jared **Chapman**, Utah Valley University, Orem, USA (Presentation Only)	"Face-to-face" or "sim-to-sim" : Pro's and Con's Regarding Groupwork using a Games-based Environment Ole Jørgen **Ranglund**, Tone **Vold**, Synnøve **Arntzen** and Hanne **Haave**, Inland Norway University of Applied Sciences, Norway	Video Game Usage, Substance Abuse, and Sleep Among College Students Justin **Asbee**, Danica **Slavish**, University of North Texas, Daniel **Taylor**, Arizona State University and Jessica **Dietch**, Oregon State University, USA	Interactive Storytelling Experience for Museums in the era of COVID-19 Saif **Alatrash**, Sylvester **Arnab**, Coventry University, UK and Kaja **Antlej**, Deakin University, Australia
16:20	Networking in Small Groups to Catch up with Colleagues and build New Connections for Future Collaboration				
17:00	*Close of Conference Day*	*Close of Conference Day*	*Close of Conference Day*	*Close of Conference Day*	*Close of Conference*

	Friday 24 September 2021				
08:30	**Zoom Room 1 Opens**				
09:00	**Room 1: Opening Messages**				
09:05	**Keynote Address: Diana Laurillard, Professor of Learning with Digital Technology at UCL Knowledge Lab, University College London** ***A Constructionist approach to games for conceptual change***				
09:50	***Introduction to ECGBL 2022***				
10:00	**Conference splits into streams**				
	Room 1 **Stream A - Escape Rooms** **Chair: Rajiv Vaid Basaiawmoit**	**Room 2** **Stream B - Mathmatics** **Chair - Stavroula Zoi**	**Room 3** **Stream C - Strategy and Learning Through Failure** **Chair: Antonia Schorer**	**Room 4** **Stream D - Poster Session** **Chair - Panagiotis Fotaris**	**Room: 5** **Stream E - GBL Issues** **Chair - Lars Elbaek**
10:10	An Adaptation of the 'Escape Rooms' Methodology in Online Learning to Facilitate and Investigate Active Learner-led Activities and Experiences Sylvester **Arnab**, Emma **Eyre**, Mark **Noon**, Sarah **Kernaghan-Andrews** and Dominic **Mahon**, Coventry University, UK	Do Games Reduce Maths Anxiety? A Review of the Current Literature. Pierpaolo **Dondio**, Viacheslav **Gusev**, Mariana **Rocha**, TU Dublin and Flavia **Santos** , University College Dublin, Ireland	That Cute Creeper Just Blew Up My House: Lessons in Resilience in Minecraft Games Kim **Balnaves**, Murdoch University, Perth, Australia	"The Crucial Role of Participation in the Development of Game-based Learning Thea Nieland, Miriam Burfeind, Charlotte Urra and Kai-Christoph Hamborg, Osnabrueck University, Germany" "Development and Assessment of A CardGame for Learning Ionic Compound Solubility Elaine Tsai and Steve Anderson, Taipei American School, Taiwan " "Schoolers & Scholars: A Project Focussing on RPG in Elementary Education Eduardo Nunes and Mário Cruz, InED - Escola Superior de Educação - Instituto Politécnico do Porto, Portugal" "Digital Games for Acquiring Everyday Life Skills for Students with Intellectual Disabilities Kristian Stancin, Natasa Hoic-Bozic and Martina Holenko Dlab, University of Rijeka, Croatia" "A Serious Game to Anticipate Handwriting Difficulties Screening Through Visual Perception Assessment Chiara Piazzalunga, Linda Greta Dui, Simona Ferranti, Matteo Matteucci, Politecnico di Milano, Cristiano Termine and Marisa Bortolozzo, University of Insubria, Italy" "Design of an Educational Game to Foster Self-regulated Learning Nathalie Zetzmann, Tim Moritz Böhm and Franziska Perels, Saarland University, Germany " "Towards an Implementation of Escape-Room Games in an Educational Context Iris Groher, Barbara Sabitzer, Corinna Hörmann and Alexander Hofer, Johannes Kepler University Linz, Austria"	The Road to AI Literacy Education: From Pedagogical Needs to Tangible Game Design Marvin **Zammit**, Iro **Voulgari**, Antonios **Liapis** and Georgios **Yannakakis**, Institute of Digital Games, University of Malta
10:30	Enhancing Problem-solving Skills with Educational Escape Rooms: A Middle School Case Study Masiar **Babazadeh** and Manrico Francesco **Frigerio**, Scuola universitaria professionale della Svizzera italiana, Switzerland	XR Maths: Designing a Collaborative Extended Realities Lab for Teaching Mathematics Marco **Gilardi**, Thomas **Hainey**, Andisheh **Bakhshi**, Cristina **Rodriguez** and Alan **Walker**, University of the West of Scotland, Paisley, UK	BITINLine: A Serious Game to Enhance Business Information Technology and Strategy Alignment Luuk **Collou**, Saxion university of applied sciences, Enschede, Guido **Bruinsma** and Maria **Iacob**, University of Twente, Netherlands		Toward a Successful Badge Design in Gamified e-Learning: A Literature Review Adam **Palmquist**, Applied IT/University of Gothenburg, and Izabella **Jedel**, Insert Coin, Gothenburg, Sweden
10:50	Escape Room Experience for Team Building Through Gamification Using Deep Reinforcement Learning Aristotelis **Lazaridis**, Georgios **Liapis**, and Ioannis **Vlahavas**, Aristotle University of Thessaloniki,Greece	How to Model a Visual Novel Game to Train and Identify Players' Soft Skills? Jérôme **Hernandez**, Mathieu **Muratet**, Matthis **Pierotti**, LIP6/Sorbonne Université and Thibault **Carron**, Origamix-RH, Paris, France	Gamification of Strategic Thinking: A COTS Boardgame for Learning Scrum, Strategy Development and Strategy Implementation Thorsten **Kodalle**, The Bundeswehr Command and Staff College, Hamburg, Mark **Schmidt**, Hamburg University of Technology, Germany, Will **Thomas**, University of Suffolk, UK and Maren		Towards the Mapping of Learning, Playful, and Frugal Aspects for Developing 21st Century Competencies and Resilience Sylvester **Arnab**, Dominic **Mahon**, Alex **Masters**, Luca **Morini**, Coventry University, UK, Jacey-Lynn **Minoi** and Fitri **Mohamad**, Universiti Malaysia, Sarawak, Malaysia
11:10	Smart Escape Rooms for Cultural Heritage: A Systematic Review Zoi **Karageorgiou**, Konstantinos **Michalakis**, Markos **Konstantakis**, Georgios **Alexandridis** and George **Caridakis** University of the Agean, Greece	Development of Mathematical Thinking Through Playing Video Games Mária **Čujdíková** and Peter **Vankúš**, Comenius University in Bratislava, Slovakia	Failures in Game-based Learning Experiences Sometimes Win Adriana **Fogel**, Daniela **De Sousa**, Patrícia **Padrão**, and José Origamix, University of Porto, Portugal		Universal Sprint Game that Teaches the Basics of Financial Literacy Ekaterina **Kubina**, Marina **Bareicheva** and Natalia **Stepanova**, Ural Federal University named after the First President of Russia B. N. Yeltsin, Russia
11:30	Can you Escape from Dr. Tom Cat's Lab? Educational Escape-rooms with Scientists, Riddles and Serious Games as Learning Tools Christos **Malliarakis**, University of Macedonia, Thessaloniki, Greece, Olga **Shabalina**, Volgograd State Technical University, Russia and Peter **Mozelius**, Mid Sweden University, Sweden	The Effect of Collaborative Gamification in the Student's Experience in a Mathematics Course David Antonio **Buentello-Montoya**, Tecnológico de Monterrey, Zapopan, México	Source Analysis of Wikipedia Articles about Indie Games with Educational Possibilities Jorge **Oceja**, Valencian International University, Valencia and Ángel Obregón **Sierra**, Universidad Isabel I, Spain		
11:50	*Lunch Break*	*Lunch Break*	*Lunch Break*	*Lunch Break*	*Lunch Break*

	Room 1 **Stream A - Mini Track on Measurement & Evaluation for Game-Based Learning** **Chair - Stina Thunberg**	Room 2 **Stream B Mobile Games** **Chair - Daniel Handle-Pfeiffer**	Room 3 **Stream C - Learnign through design** **Chair: Luzia Leifheit**	Room 4 **Stream D - Poster Session** **Chair - Panagiotis Fotaris**
12:50	Game-Based Learning and Eye-Tracking: Approaches to Integrating Gaze data into Learning Assessment Maria **Koutroumani** and Maria **Rigou**, University of Patras, Greece	STEMadium: Learning STEM from a Mobile Game using the Science of Baseball Tamara **Kuhn**, dfusion and Jill **Denner**, ETR, Scotts Valley, CA, USA	Evolving and Improving a Board Game to Develop Business Acumen Suzaan **Hughes**, University of Johannesburg, South Africa	"Behaviour and Solution Patters in Chemical Engineering Education Game Log Data Chioma Udeozor, Fernando Russo Abegão and Jarka Glassey, Newcastle University, UK" "Introducing Gamification in Introductory Programming Courses Alexander Hofer and Iris Groher, Johannes Kepler University, Austria" "Creating Gameful Experience in the Digital Era: A Double-Mediation Model Mona Höyng, University of Duisburg-Essen, Duisburg, Germany" "Gamifying Reading and Writing in Collaborative EFL Primary Education Marta Fortunato, António Moreira and Ana Raquel Simões, Universidade de Aveiro, Portugal " "Middle School Students' Political Interest, Efficacy and Commitment During Game Play Veronica Szczygiel , Fordham University, New York, USA " "Learning Glucose Metabolism Through "Sugar Scramble": A Digital Game-Based Approach Colleen Tang Poy, Stavroula Andreopoulos, Sian Patterson, Jodie Jenkinson and Derek Ng, University of Toronto, Canada"
13:10	Paper-based vs. Digital Prototyping: How to Evaluate Serious Game Concepts at Different Stages of Development Cornelia **Schade** and Antonia **Stagge**, Technische Universität Dresden, Germany	Evidence of a Relationship Between Spatial Skills and Digital Puzzle Games Iolie **Nicolaidou**, George **Chrysanthou**, Marita **Georgiou**, Christos **Savvides** Stavrini **Toulekki**, Cyprus University of Technology, Cyprus	Game-based Learning Mobile-app for Teaching the Binary Numeral System Lee-Yeng **Ong**, Meng-Chew **Leow** and Chin-Keong **Tan**, Multimedia University, Malaysia	
13:30	Strategic Sustainability by Serious Gaming: A Case Study of STRASUS Ningna **Xie** and Raphael **Heereman von Zuydtwyck**, University of Applied Sciences Niederrhein, Germany/Maastricht University, Netherlands	Quick and Dirty Group Testing of a Mobile-app for Educators Teaching Digital Literacy and Production Gunver **Majgaard**, University of Southern Denmark, Odense, Denmark	The Virtual Reality Engineering Summer Camp: Promoting STEM Pathways Through Innovative Technology Fadi **Castronovo**, University of Brighton, UK, Bruce **Simon**, Institute for STEM Education at CSU East Bay, and Mario **Flores**, Mission College, USA (Presentation Only)	
13:50	Evaluating Game and Learning Mechanics Separately: A Practical Approach to Evidence-based Serious Game Development Anna **Seidel**, Franziska **Weidle** and Claudia **Börner**, Brandenburg University of Technology, Cottbus-Senftenberg, Germany	Cultural Dimension in User Experience - Mobile Games for Older Adults: A Case Study Ryann **Deloso**, Anja **Poberznik**, Sari **Merilampi**, Satakunta University of Applied Sciences (SAMK), Finland, Nuno **Pombo** and Bruno **Silva**, University of Beira Interior, Portugal	Training Indoor Navigation Skills: A Mobile Game for People with Intellectual Disabilities Inga **Volosnikova**, Olga **Shabalina**, Volgograd State Technical Universtity, Aleksandr **Davtian**, Moscow Institute of Physics and Technology, Russia and David **Moffat**, Glasgow Caledonian University, UK	
14:00	Using Multimodal Learning Analytics to Explore Collaboration in a Sustainability Co-located Tabletop Game Maria Ximena **Lopez**, University of Huddersfield, UK, Carlo **Fabricatore**, E.H.E. Europa Hochschule EurAKA, Switzerland, Francesco **Strada**, and Andrea **Bottino**, Politecnico di Torino, Italy	'Dangerous Zone'. Games Caught Between Education and Indoctrination Michal **Kabát** and Juraj **Kovalčik**, University of Ss. Cyril and Methodius in Trnava, Slovakia	Thinking Critically About Video Games: A Curriculum Construction Study Evgeniya **Kuznetsova**, Jennifer **Jenson**, and Danielle **Kim**, The University of British Columbia, Canada	
14:20	*Room 1* *Top games of The 9th International Educational Games Competition present their games to the participants*			
14:45	*Winners of The 9th International Educational Games Competition, Poster competition and best PhD Paper are presented*			
15:00	**Summary and Close of the Conference - Room 1 will stay open for casual discussion**			