

1. Record Nr.	UNISA996464397503316
Titolo	HCI in games : serious and immersive games : third international conference, HCI-games 2021, held as part of the 23rd HCI international conference, HCII 2021, virtual event, July 24-29, 2021, proceedings, part II / / Xiaowen Fang, editor
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-77414-7
Descrizione fisica	1 online resource (414 pages)
Collana	Lecture Notes in Computer Science ; ; 12790
Disciplina	794.8
Soggetti	Computer games Human-computer interaction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Foreword -- HCI International 2021 Thematic Areas and Affiliated Conferences -- Contents - Part II -- Contents - Part I -- Serious Games -- Mindful Gaming: User Experiences with Headspace and Walden, a Game -- 1 Introduction and Related Literature -- 1.1 Headspace and the Gamification of Mindfulness -- 1.2 Walden and Traditions of Mindful Play -- 1.3 Qualitative Studies on User Experiences and Why They Matter for Studying Mindfulness -- 1.4 Research Questions and Scope of This Study -- 2 Theoretical Framework -- 3 Method: Phenomenological Case Study -- 4 Findings -- 4.1 Mindfulness as Contemplative Self-reflection -- 4.2 Mindfulness as a Long-Term Process -- 4.3 Mindfulness as a Byproduct of Play, and a Third-Order Design Problem -- 4.4 Mindfulness as a Tension Between Exploring vs. Completing Objectives -- 5 Practical Applications of this Research for Iterative, Playcentric Design of Mindfulness Software -- 6 Limitations and Suggestions for Future Research -- 7 Conclusions and Suggestions for How to Develop Mindfulness Software -- References -- Gamification of ERP Training in Local Governments -- 1 Introduction -- 2 Literature Review -- 2.1 Gamification Features -- 2.2 Extrinsic Motivation -- 2.3 Intrinsic Motivation -- 2.4 Retention of Information -- 2.5 The Effectiveness of Traditional ERP Training --

2.6 Experience of Local Governments in Training for New Technology
-- 2.7 Gamification Application in the Enterprise Environment -- 2.8
Gamification Models in Education -- 3 Case Study -- 4 Proposed
Research Model -- 5 Conclusion -- Appendix: Proposed Sample
of the Gamification Training in One Local Government -- References --
Orpheus: A Voice-Controlled Game to Train Pitch Matching -- 1
Introduction -- 2 Related Works -- 2.1 Basic Concepts in Pitch
Matching -- 2.2 Serious Games for Pitch Matching -- 3 Design
and Implementation.
3.1 Game Design -- 3.2 Prototype Implementation -- 4 Pilot Case
Study -- 5 Conclusion -- References -- Influence of a Video Game
on Children's Attention to Food: Should Games Be Served
with a Character During Mealtime? -- 1 Introduction -- 2 Background
-- 2.1 Related Work -- 2.2 Literature Review -- 3 Design Concepts --
3.1 Theoretical Basis -- 3.2 Feedback Design -- 3.3 Character Design
-- 4 Materials and Methods -- 4.1 Materials -- 4.2 Pre-survey -- 4.3
Procedure -- 5 Results -- 6 Conclusion and Discussion -- References
-- Ludus Magnus - A Serious Game for Learning the Latin Language --
1 Introduction -- 2 Related Work -- 3 Concept of Ludus Magnus -- 4
Story of Ludus Magnus -- 5 Important Gameplay Mechanics -- 5.1
Game Engine -- 5.2 Quest System -- 5.3 Interactive Objects -- 5.4
Equipment System -- 5.5 Combat System -- 5.6 Vocabulary Trainer --
5.7 Grammar Exercises -- 5.8 Level Design -- 6 Future Work -- 6.1
Future Game Content -- 6.2 Future Evaluation -- 7 Conclusion --
References -- PLAY for LEARNING: Serious Games to Assist Learning
of Basic Didactic Concepts: A Pilot Study -- 1 Introduction -- 2
Background -- 3 Research Methodology -- 4 Solution Design Proposal
-- 4.1 Interfaces and Interaction Design -- 4.2 Design Implementation
-- 4.3 Preliminary Assessment -- 4.4 Results and Discussion -- 5
Conclusion and Future Work -- References -- Improve Students'
Learning Experience in General Chemistry Laboratory Courses -- 1
Introduction -- 2 Literature Review of VR Applications -- 2.1 Virtual
Reality -- 2.2 Laboratory Education Methods -- 2.3 VR in Higher
Education -- 3 Chemistry Lab and Proposed Design with VR Technology
-- 3.1 Current Solution -- 3.2 Concerns of Current Solutions -- 3.3
Expectations of Future Systems -- 3.4 Possible Solutions -- 3.5
Proposed Study -- 4 Conclusions -- References.
A Study on Serious Game Practice to Improve Children's Global
Competence -- 1 Introduction -- 1.1 Literature Review -- 2 Method --
2.1 Design Concept -- 2.2 The Snake Battle -- 2.3 You Say One, I Say
Two -- 2.4 First Meet -- 2.5 Animals Go Home -- 3 Results -- 4
Discussion -- 5 Limitation -- References -- JomGames: Creating
a Motivating Learning Environment -- 1 The Behavioural Effects
of Games on Students -- 2 Legacy and Related Works of Game Learning
and Gamification -- 3 Methodology -- 4 Results and Findings -- 5
Conclusion, Limitation, and Future Work -- References -- Multicraft:
A Multimodal Interface for Supporting and Studying Learning
in Minecraft -- 1 Introduction -- 2 Prior Literature -- 2.1 Autcraft --
2.2 Ability Based Design -- 2.3 Multimodal Learning Analytics -- 2.4
Spatial Reasoning Skills -- 2.5 Summary -- 3 Multicraft -- 3.1 Design
Principles -- 3.2 System Technical Architecture -- 4 Part 1: User
Experiences with Multicraft -- 4.1 Overview -- 4.2 Participants -- 4.3
User Testing Tasks -- 4.4 Data Collection -- 4.5 Data Analysis -- 4.6
Observations and Findings -- 5 Part 2: Multimodal Analyses
of Minecraft Gameplay -- 5.1 Overview -- 5.2 Participants -- 5.3 User
Testing Tasks -- 5.4 Data Collection -- 5.5 Data Analysis -- 5.6
Observations and Findings -- 6 Discussion -- 7 Limitations -- 8
Conclusion -- References -- Gamification and Learning --

Understanding the Impact on Learners' Reading Performance and Behaviour of Matching E-Learning Material to Dyslexia Type and Reading Skill Level -- 1 Introduction -- 2 Background -- 2.1 Dyslexia in Arabic -- 2.2 Adaptation in the E-Learning Domain -- 2.3 Related Work -- 3 Experiment 1: Dyslexia Type Adaptivity -- 3.1 Data Collection -- 3.2 DysTypeTrain System -- 3.3 Method -- 3.4 Participants -- 3.5 Findings -- 4 Experiment 2: Reading Skill Level Adaptivity.

4.1 Experiment's Questions and Hypotheses -- 4.2 Measurements and Data Collection -- 4.3 DysSkillTrain System -- 4.4 Method -- 4.5 Participants -- 4.6 Results -- 5 Discussion -- 6 Conclusion and Future Work -- References -- Scaffolding Executive Function in Game-Based Learning to Improve Productive Persistence and Computational Thinking in Neurodiverse Learners -- 1 Computational Thinking (CT) -- 1.1 Engaging Neurodiverse Learners in CT Through Games -- 2 Productive Persistence -- 3 Executive Function -- 3.1 Designing Supports for Neurodiverse Learners in CT through Games -- 4 Overview of INFACT -- 4.1 Example 1: NumberFactory -- 4.2 Example 2: Zoombinis -- 5 Discussion -- 6 Conclusion -- References -- A Framework of Gamified Learning Design Targeting Behavior Change and Design of a Gamified Time Management Training Manual -- 1 Introduction -- 2 Behavior Change Model -- 2.1 TTM and SNAP Model -- 3 Design -- 3.1 Background of Design -- 3.2 Content of Design -- 3.3 Gamification of Design -- 4 Application -- 4.1 Environment -- 4.2 Application of the Manual -- 4.3 Discussion -- 5 Experiment -- 5.1 Questions and Hypothesis -- 5.2 Method -- 5.3 Results -- 5.4 Discussion -- 6 Conclusion -- References -- Can Games and Gamification Improve Online Learners' Outcomes and Satisfaction on the Madrasati Platform in Saudi Arabia? -- 1 Introduction -- 2 Background -- 2.1 Games and Gamification Elements -- 3 The Madrasati Platform -- 3.1 Teachers and the Madrasati Platform -- 3.2 The Effect on Learners of Integrating Games and Gamification into Learning -- 4 Discussion -- 5 Conclusion -- References -- Methodological Considerations for Understanding Students' Problem Solving Processes and Affective Trajectories During Game-Based Learning: A Data Fusion Approach -- 1 Introduction -- 2 Research Context and Purpose -- 2.1 Data Sources and Participants.

3 Approaches to Multimodal Data Collection and Analysis -- 3.1 Emotion from Facial Expression -- 3.2 Emotion from Gameplay Sequence -- 3.3 Multimodal Data Fusion Between Facial Expression and Gameplay Data -- 4 Multimodal Data Fusion of Zoombinis Gameplay Data -- 4.1 Data Wrangling Procedure -- 4.2 Modeling Students' Problem Solving Process with Hidden Markov Models -- 5 Discussion and Implications -- References -- Using Eye Tracking for Research on Learning and Computational Thinking -- 1 Introduction -- 2 Theoretical Constructs and Perspectives -- 2.1 Eye-Mind Assumption (EMA) and Visual Attention -- 2.2 Engagement -- 2.3 Inferring Cognitive Processes, States, and Traits via Eye Tracking -- 2.4 Cognitive Load and Effort -- 3 Prior Eye-Tracking Reviews -- 3.1 Summary -- 4 A Survey and Evaluation of Existing Eye-Tracking Technologies -- 4.1 Introduction -- 4.2 Evaluation of Freeware Eye-Trackers -- 5 Conclusion and Implication -- References -- Evaluating the Use of Visual Prompts in Online Meeting Applications for Kindergarteners -- 1 Introduction -- 2 Literature Review -- 3 Methods -- 3.1 Participants -- 3.2 Equipment -- 3.3 Tasks -- 3.4 Procedures -- 3.5 Design Implementation -- 3.6 Evaluation -- 4 Results -- 4.1 Accuracy Rate -- 4.2 Completion Time -- 4.3 Optimum Visual Prompt -- 5 Discussion -- 6 Conclusion -- References --

Gamification Design Predicaments for E-learning -- 1 Introduction -- 2 Related Work -- 3 Game Theory: Background -- 4 Gamification Design Predicaments -- 5 Discussion -- 6 Conclusion -- References -- Game Design, Creativity and e-Learning: The Challenges of Beginner Level Immersive Language Learning Games -- 1 Introduction: Remote Learning for Language Acquisition -- 2 Games as Learning Facilitators -- 3 Case Study: Portuguese as Foreign Language Course -- 3.1 Research Methods.

3.2 First Results and Discussion: Challenges and Opportunities.