

1. Record Nr.	UNINA9910488691103321
Autore	Zaphiris Panayiotis
Titolo	Learning and collaboration technologies . Part II : games and virtual environments for learning : 8th International Conference, LCT 2021, Held As Part of the 23rd HCI International Conference, HCII 2021, Virtual Event, July 24-29, 2021, proceedings // Panayiotis Zaphiris and Andri Ioannou
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-77943-2
Descrizione fisica	1 online resource (359 pages)
Collana	Lecture Notes in Computer Science ; ; v.12785
Disciplina	004.019
Soggetti	Human-computer interaction User-centered system design - Research
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 -- Games and Gamification in Learning -- Quiz Tools in Algorithms Courses: Applying Educational Gamification Design Principles and Encouraging Students' Interaction -- 1 Introduction -- 2 Gamification in Education -- 3 Analysis of Gamified Tools -- 4 Exploring Kahoot! -- 4.1 Profile of Participants -- 4.2 Gamified Tool Application -- 4.3 Result Analysis -- 5 Related Work -- 6 Discussion -- 7 Conclusion -- References -- FLCARA: Frog Life Cycle Augmented Reality Game-Based Learning Application -- 1 Introduction -- 2 Literature Review -- 3 Motivation -- 4 The Application -- 5 Bloom's Digital Taxonomy -- 6 Methodology -- 6.1 Participants -- 6.2 Procedure -- 7 Results -- 7.1 Results from the Questionnaire -- 7.2 Heuristic Evaluation -- 7.3 Participants Subjective Feedback -- 8 Conclusion and Future Work -- References -- "Let There Be Light": Evaluating a Serious Game Using Image Schemas for Teaching Preschool Children Scientific Concept and Developing Their Creativity -- 1 Introduction -- 2 Background -- 3 Related Studies -- 3.1 Image Schema -- 3.2 Learning Through Play -- 4 Method -- 4.1 Procedure -- 4.2 Results -- 5 Game Design -- 6

Evaluation -- 6.1 Participants -- 6.2 Procedure -- 6.3 Measurements -- 6.4 Findings -- 6.5 Interview Results -- 7 Conclusion -- References

-- Transforming Classic Learning Games with the Use of AR: The Case of the Word Hangman Game -- 1 Introduction -- 1.1 Game Based Learning -- 1.2 Augmented Reality in Education -- 2 Background Work -- 2.1 Alternative Educational Tools for Literature and Language Education -- 2.2 AR in Literature and Language Education -- 2.3 Hand Interaction with AR -- 3 Field Study Methodology -- 4 Our AR Hangman Game -- 4.1 Constructing the Game. 4.2 Playing the Game: The Case of the Word Hangman -- 5 Discussion - Research Outcomes - Results -- 5.1 Field Study Results' Analysis -- 5.2 Conclusions -- 6 Future Work -- References -- Educational Video Game Design for Teaching and Learning Musical Harmony -- 1 Introduction -- 2 Theoretical Framework -- 3 Methodology -- 4 Prototype -- 4.1 End-User and Context -- 4.2 Type of Game -- 4.3 Visual Design -- 5 Measured Usability Attributes -- 6 Methods and Usability Instruments -- 6.1 Icon Usability -- 6.2 End-User Questionnaire -- 6.3 Prototype Evaluation -- 6.4 Heuristic Evaluation Questionnaire -- 6.5 Focus Group -- 7 Analysis of the Results -- 8 Redesign -- 9 Conclusions -- 10 Future Work -- References -- A Video Game-Like Approach to Supporting Novices in Learning Programming -- 1 Introduction -- 2 Related Work -- 3 Proposed Approach -- 3.1 Staging Mechanism -- 3.2 Assistant Chatbot -- 4 Implementation -- 5 Experiment -- 5.1 Participants -- 5.2 Procedure -- 5.3 Results -- 6 Discussion -- 7 Conclusions and Future Work -- References -- Completeness and Collaboration in the Early Design Phase of Learning Games: Do Ideation Cards Provide Scaffolding? -- 1 Introduction -- 2 Related Work -- 2.1 Collaboration and Completeness in the Design Process -- 2.2 Use of Innovative Approaches to Aid the Design Process -- 2.3 Use of Card-Based Tools in Various Domains -- 3 Material and Methods -- 3.1 Research Questions and Research Approach -- 3.2 LEAGUE Ideation Toolkit -- 3.3 Research Context, Participants, and Procedure -- 3.4 Data Collection and Analysis -- 4 Results -- 4.1 Research Question 1: Completeness (GBL Dimensions Covered) -- 4.2 Research Question 2: Collaboration (Main Contributing Factors) -- 5 Discussion -- 5.1 Limitations of the Study -- 6 Conclusion -- References.

Mobile Game-Based Learning in Distance Education: A Mixed Analysis of Learners' Emotions and Gaming Features -- 1 Introduction -- 2 Theoretical Background -- 2.1 Learning Related Emotions and Distance Education -- 2.2 Game Based Learning Features and Emotional Design -- 3 Material and Methods -- 3.1 Mobile Game-Based Learning App -- 3.2 Instrument and Measures -- 3.3 Participants and Procedure -- 3.4 Data Analysis -- 4 Results and Discussion -- 4.1 Gaming Performance -- 4.2 Descriptive Statistics -- 4.3 Sentiment Analysis -- 4.4 Mobile Game-Based Learning Features and Emotional Effects -- 5 Conclusions -- References -- Tangible Solutions for Learning Basic Math Skills: Exploring Concepts of Emotions and Enaction -- 1 Introduction -- 2 Background and Related Work -- 2.1 Enactive Systems and Emotions Connected to Learning -- 2.2 Tangible Technologies for Math Learning -- 2.3 Enactive Systems for Math Learning -- 3 The Emotion Math for Kids Prototype -- 3.1 Prototype Design Decisions -- 3.2 Design and Implementation of the Hardware Components -- 3.3 Design and Implementation of the Software Components -- 3.4 System Interfaces and Features -- 4 User Evaluation -- 4.1 Study Description -- 4.2 Assessment Results -- 5 Conclusion -- References -- Chatbots in Learning -- University Student Surveys Using Chatbots: Artificial Intelligence Conversational Agents -- 1 Introduction -- 2 Background

-- 3 Research Methodology -- 4 Results and Analysis -- 4.1 Evaluation of the Conversational Agent -- 5 Conclusions -- References -- An Overview of the Use of Chatbots in Medical and Healthcare Education -- 1 Introduction -- 2 Method -- 2.1 Search Strategy -- 2.2 Study Selection Criteria -- 2.3 Screening Strategy and Article Review -- 2.4 Data Extraction and Synthesis -- 3 Results -- 3.1 Virtual Patients -- 3.2 Patients Education -- 3.3 Course Assistance in HEIs. 4 Discussion and Conclusion -- References -- Studying How to Apply Chatbots Technology in Higher-Education: First Results and Future Strategies -- 1 Introduction -- 2 State of the Art -- 3 EDUBOTS Project -- 4 Students Surveys -- 4.1 Initial Survey -- 4.2 Extended Survey -- 4.3 Extended Survey Results -- 5 Methodological Approaches to Introduce Chatbots in Higher Education -- 5.1 Scenario 1: Passive Group Chat -- 5.2 Scenario 2: Active Group Chat -- 5.3 Scenario 3: Correcting Exercises -- 6 Conclusions and Future Work -- References -- `Are You OK?' Students' Trust in a Chatbot Providing Support Opportunities -- 1 Introduction -- 1.1 Help-Seeking Behavior -- 1.2 Human-Computer Trust and Chatbots -- 1.3 Aims of the Study -- 2 Methodology -- 2.1 Context -- 2.2 Participants -- 2.3 Intervention -- 2.4 Measures -- 2.5 Analyses -- 3 Results -- 3.1 Students' Responses to the Chatbot -- 3.2 User Satisfaction and Trust -- 3.3 Connections Between Variables -- 4 Discussion -- 4.1 Responses to the Chatbot Reveal Latent Needs for Support -- 4.2 Trust with Chatbots in Different Scenarios -- 4.3 Limitations -- 4.4 Implications -- 5 Conclusions -- References -- Usability and User Experience of a Chat Application with Integrated Educational Chatbot Functionalities -- 1 Introduction -- 2 Background to the Research -- 2.1 Related Work -- 2.2 Application in This Study -- 3 Research Methodology -- 3.1 Research Questions -- 3.2 Research Instruments -- 4 Study Results -- 4.1 Participants -- 4.2 Usability of the Application Differ -- 4.3 User Experience of the Application Differ -- 5 Concluding Remarks -- References -- Envisioned Pedagogical Uses of Chatbots in Higher Education and Perceived Benefits and Challenges -- 1 Introduction -- 1.1 Chatbots in Education -- 1.2 Users' Expectations for the Use of Chatbots in Higher Education -- 2 Research Questions of the Study. 3 Methodology -- 3.1 Participants -- 3.2 Data Collection -- 3.3 Data Analysis -- 4 Results -- 4.1 Envisioned Pedagogical Uses of Chatbots in Higher Education (RQ1) -- 4.2 Benefits and Challenges of the Proposed Pedagogical Uses (RQ2) -- 5 Discussion -- 5.1 Envisioned Pedagogical Uses of Chatbots in Higher Education (RQ1) -- 5.2 Benefits and Challenges of the Proposed Pedagogical Uses (RQ2) -- 6 Implications and Limitations -- References -- AR, VR and Robots in Learning -- Towards a New Chemistry Learning Platform with Virtual Reality and Haptics -- 1 Introduction -- 2 Methods -- 2.1 Application -- 2.2 Video Demo -- 2.3 Questionnaire -- 3 Results -- 4 Conclusion -- References -- Effect of Height in Telepresence Robots on the Users' Spatial Awareness -- 1 Introduction and Background -- 2 Research Question and Hypotheses -- 3 Approach -- 4 Methods -- 5 Results and Analysis -- 6 Threats to Validity -- 7 Conclusion and Outlook -- References -- Driving Success: Virtual Team Building Through Telepresence Robots -- 1 Introduction and Background -- 2 Research Questions and Hypothesis -- 3 Approach -- 4 Methods -- 5 Results and Analysis -- 6 Discussion -- References -- Design of Children's Entertainment and Education Products Based on AR Technology -- 1 Background -- 2 Current Situation of Currently Available Children's Educational Products and Trends -- 3 User Study -- 4 Game Design -- 4.1 Tangible Interaction -- 4.2 Touchscreen Interaction -- 4.3 Feedback Mechanism -- 5 The Key to Design Implementation -- 5.1

Principle Experiment of the Recognition Technology -- 5.2 Design
of the Supporting Product -- 5.3 Operation Process of the Game -- 5.4
Usability Testing -- 6 Conclusion -- References -- Heritage
Augmented Reality Applications for Enhanced User Experience -- 1
Introduction -- 2 Method -- 2.1 Workshop -- 2.2 User Experience
Evaluation -- 3 Results.
4 Discussion.
