

© International Conference on Information Communication Technologies in Education, 2022

ICICTE 2022 Conference Programme

Programme Committee

Nancy Pyrini
Founder and Director of ICICTE

Dr Ġorġ Mallia Chair of the Scientific Committee and Communications Coordinator

Evangeline Marlos Varonis
Editor of the Conference Proceedings

Dr Costas Tsolakidis Professor Emeritus, University of the Aegean, Greece

ICICTE 2022 Organiser:



THURSDAY JULY 7

09:00 – 10:00 Registration Lobby Muses

10:00 – 11:30
Opening Ceremonies and Keynote Address
Hall Muses

Welcome

Dr Ġorġ Mallia, Head of the Media and Communications Department, Faculty of Media and Knowledge Sciences, University of Malta, Malta

Introduction of the Keynote Speaker

Dr Costas Tsolakidis, University of the Aegean, Greece

Keynote Address

SCIENCE OUTSIDE THE CLASSROOM: INNOVATIVE EDUCATIONAL ROBOTICS STRATEGIES FOR PRIMARY SCHOOL EXPERIENCES Professor David Scaradozzi, Dipartmento di Ingegneria dell' Informazione, Università Politecnica delle Marche, Italy

11:30 – 12:00 Coffee Break Lobby Muses

12:00 – 13:30 Concurrent Plenary Session 1 & Workshop 1

Workshop 1

Science Outside the Classroom: Innovative Educational Robotics Strategies for Primary School Experiences

Facilitator: Dr Laura Screpanti, Università Politecnica delle Marche, Italy **Hall Muses**

THE ROBOPISCES TOOLKITS FOR TEACHING MARINE ROBOTICS, IOT AND CODING FROM PRIMARY EDUCATION

Manuele Silvestrini and Giacomo Fiara, ANcybernetics, Italy

SEE WHAT MY ROBOFISH CAN DO!

Sanja Martinko, OŠ Tituša Brezovačkog, Croatia Livia Alesi, Istituto Comprensivo "Solari" di Loreto (AN), Italy Mark Azzopardi, Maria Regina College SPB Primary, Malta Marios Chatzimichalis and Stavros Zafeiriou, Rodion Pedia Eleni Birou, 11th Primary School of Rhodes Nancy Pyrini and George Sarrigeorgiou, Schools of East Attica, Greece

Plenary Session 1

Pandemic Pandemonium: from Panic to Online Innovation Moderator: Dr Maria Eugenia D'Esposito, Faculdade Cultura Inglesa, Brazil

Hall Bridge

RESEARCH TRENDS OF ONLINE LEARNING IN POST-SECONDARY EDUCATION DURING THE COVID-19 PANDEMIC: A BIBLIOMETRIC ANALYSIS

Aleksander Aristovnik, Dejan Ravšelj, Lan Umek, University of Ljubljana, Slovenia Konstantinos Karampelas, University of the Aegean, Greece

Abstract

The Covid-19 pandemic has significantly disrupted postsecondary education with the transition to online learning, which was a mandatory teaching process during lockdowns. Despite the epidemiological situation improving, online learning is becoming increasingly popular as it provides new learning opportunities. Therefore, the paper aims to provide new insights into the trends in online learning in post-secondary education during the Covid-19 pandemic. The bibliometric analysis of 9921 documents published between January 2020 and March 2022, besides descriptive overview and scientific production, reveals the interplay between ICT tools and fields of study.

COVID-19 AS A DISRUPTIVE DRIVER OF ORGANIZATIONAL CHANGE: A CASE-STUDY ON LEARNING ANALYTICS ADOPTION Christina Armatas, Ada Tse and Chun Sang Chan, The Hong Kong Polytechnic University, Hong Kong SAR China

Abstract

A case-study is presented on how COVID-19 both accelerated and expanded learning analytics (LA) implementation at a Hong Kong university. Two change management models, one specific to LA, informed the actions taken to address the urgent need for data about students' learning behaviour and outcomes during the period of fully online learning enforced by the pandemic. This case-study illustrates how it is possible to be adaptable and agile in using disruptive forces to drive organizational change in a way that would otherwise be difficult, while still delivering outcomes consistent with organizational goals.

TEACHING INTERCULTURAL COMMUNICATION FOR GLOBAL SOFTWARE ENGINEERING DURING THE PANDEMIC

Patricia Brockmann, Nuremberg Institute of Technology, Germany

Abstract

The current Covid-19 pandemic has disrupted educational plans of both students and educators. In order to learn the intercultural skills necessary to work effectively in global software development teams, some students had planned to spend a semester abroad to gain international experience. Travel restrictions have forced many to cancel their plans.

Otherstudents, especially those from traditionally disadvantaged groups, have never had the financial resources to be able to plan a semester abroad. First generation students, those with a migration background or from families with limited financial means and students with children have often had difficulty in arranging to spend a semester in a foreign country, even before the pandemic.

A virtual, collaborative course was conducted as a cooperation between two universities: the Ritsumeikan University in Japan and the Nuremberg Institute of Technology in Germany. Students worked in cross-site teams, made up of roughly half of the members from each university. Communication was limited to 90 minute video conferences once a week. All other communication had to be conducted asynchronously, via chats and e-mail. Team members exchanged documents and code using cloud-based project management and collaboration software.

At the end of the semester, a project retrospective was conducted. The results of this retrospective will be used to develop specific measures aimed at supporting students from underrepresented groups in gaining international experience.

NCLUSIVE ART EDUCATION - INARTdis PROJECT

Monika Gigerl, University College of Teacher Education Styria, Austria

Abstract

The UN Convention on the Rights of Persons with Disabilities points out the right of people with disabilities to participate in cultural life (CRPD, 2007). Beyond passive participation there is also ensured the right for people with disabilities "to develop and utilize their creative, artistic and intellectual potential" (CRPD, 2007). Through art education the individual potential, resources, and development of learners during artistic educational

processes can be activated. These synergies, however, are still being overlooked and underused (Kaiser, 2021).

This contribution, "Inclusive Art Education - INARTdis Project", presents results based on a mixed methods approach, within both quantitative and qualitative methods were used. In phase 1 three steps an online survey as well as interviews with experts as well as focus group discussions were carried out in Austria in 2021: For the analysis of inclusive approaches to museums as well as arts education, pedagogues and also experts from art and cultural institutions, participated in the study. In phase 2, visitors were accompanied on three museum visits and interviewed. Feedback and assessments were collected from pupils with special educational needs in primary and secondary school as well as from adults with disabilities. This research was conducted as part of an international research project. The Erasmus+ project INARTdis answers the following research questions: What good practices to ensure participation for all and opportunities for improvement in accessibility can be found and what makes it easier for visitors to access the museum (Sanahuja Gavaldà, 2019)?

The results presented will talk about characteristics of inclusive arts education and identify factors that facilitate and inhibit the implementation of inclusive arts projects from the perspectives of teachers, museum staff and visitors. In this way, the presentation makes an important contribution to the description of inclusive art education and participation in cultural life for all people.

HRM STUDENTS' PERCEPTIONS OF AN ASSESSMENT FOR LEARNING IN A FULLY ONLINE UNIVERSITY COURSE IN SWEDEN AT THE DEPARTMENT OF EDUCATION IN UMEÅ

Monica Liljeström and Hanna Paulin, Umeå University, Sweden

Abstract

In this paper we will describe and discuss the design of an

assessment for learning (AFL) which was implemented in a fully online 15 credits first-cycle course at 50% pace during spring 2021, and report results based on the students' reflections. It was implemented in a popular HRM-course at the department of Education in Umeå, with almost 70 percent of the 150 students completing the course. It provides an orientation in HRM-theory, content about gender issues in organisations and training of investigative skills for creating reliable information of relevance for change work. The AFL addresses the Community of Inquiry (COI) model (Garrison et. al., 1999), in which a space for learning is created through processes of teaching-, cognitive- and social presence. As the cognitive presence – "the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication (Garrison et. al., 1999, 89)" is particularly regarded as a key to successful learning, the AFL was designed to resemble a future work task in hope it would enhance the students' engagement in the task. Strategies to stimulate the sense of belonging to a COI with close interaction between the participants (students and teachers), was also incorporated in the design, meant to increase cognitive and learning presence. A segment of reflection on the learning process was incorporated, since such actions gives the students the opportunity to rethink what they have learnt and connect it to their own beliefs (Chang, 2019) and hopefully regard reflection a useful tool in future work-life (Heyler, 2015). Early analysis of the students' reflections indicates that the AFL-design works guite sufficiently in many aspects.

13:30 – 15:00 Buffet Lunch Restaurant Thalassa

15:00 – 16:30 Concurrent Workshops 2 & 3

Workshop 2

XR for Education – Authoring XR Content

Facilitator: Prof. Eleni Mangina, University College Dublin, Ireland Demostrar: Mr. Farzin Matin, University College Dublin, Ireland Workshop Manager: Dr. Na Li, University College Dublin, Ireland **Hall Muses**

Objectives

- 1. Presenting the results of a survey on XR for educational pedagogy;
- 2. Awareness of Ethics in XR for Education
- 3. Presenting 42 recommendations for XR Ethics in Education
- 4. Good practices of creating XR content through open source authoring toolkit

Methods

Presentation; Miro online participation for hybrid format; Provision of open source authoring toolkit and hands on experience

Outline

This workshop aims to present the results of a survey on XR for educational pedagogy and the needs identified from >300 educators for digital skills advancement. Also issues related with the ethics in XR for Education, both from the educator's perspective and the students' perspective in terms of digital content. The presentation will also focus on the 42 recommendations for XR Ethics in Education as published from the IEEE White paper, through the IEEE Global Initiative on XR Ethics. Good practices of creating XR content through an open source authoring toolkit will aim to accelerate the uptake of AR in education, by providing an authoring tool and learning management system to teachers. We believe that introduction at scale requires to put tailored authoring tools in the hands of teachers to support the production of bespoke AR learning experiences for the mainstream as well as for the Long Tail. The participants will have a hands on experience with the released

open source authoring toolkit developed through the H2020 ARETE project. A key barrier to adoption of eXtended Reality (XR) in the classroom is the lack of XR-enabled content, the affordability of hardware and the lack of understanding of pedagogical arrangements that teachers need to put in place to be able to integrate AR in their teaching. To address this and to facilitate the design of XR content that will be well aligned to the curriculum, we have further developed the MirageXR software, also complementing it with a plugin for Moodle, an open-source learning platform, to enable teachers to manage and schedule content efficiently.

Workshop 3

Post-COVID-19 Teaching: Reflections on Experiences and Lessons Learnt

Facilitator: Marcia Håkansson Lindqvist, Mid Sweden University, Sweden

Hall Bridge

Objectives

This workshop will provide an opportunity for the ICICTE community to participate and contribute to the discussion on post-Covid-19 teaching regarding reflections on experiences and lessons learnt. Further, the objective is to plan for a collaborative paper based on these reflections.

Method

Interactive workshop at site and online

Outline

In this interactive workshop on design for learning using the model of Design Dice, we will explore the Design Dice model, a model that we have developed and used with several teachers in several schools in Nordic countries. The parts of the dice is

- 1) content,
- 2) competences,

- 3) added value,
- 4) room,
- 5) tool,
- 6) time.

How to combine these parts so that the planned work will create added value is at the core of the intentions using the model.

Rhodes, where a number of very successful ICICTE conferences have been held over the years



Young Researchers' Night



18:00

Transportation to Rodion Pedia

Address: Ilia Venezi, Rodos 851 00 Website: https://rpschool.gr/en/

SCIENCE OUTSIDE THE CLASSROOM: INNOVATIVE EDUCATIONAL ROBOTICS STRATEGIES FOR PRIMARY SCHOOL EXPERIENCES

website: https://www.robopisces.eu/







18:15 - 21:30

ROBOPISCES SCHOOLS' CONTEST: May the best RoboFish win!

18:15 - 18:45

Arrival at the School and Welcome Refreshments

18:45 - 19:00

Welcome and About the Project

Welcome Professor Costas Tsolakidis, University of the Aegean, Greece

Welcome Professor David Scaradozzi, Dipartmento di Ingegneria dell' Informazione, Università Politecnica delle Marche, RoboPisces Coordinator, Italy

Welcome and Presentations by the teachers and the students from the Rodion Pedia School

19:00 - 20:00

Semifinal

Presentation of the challenge; "Tune up" your RoboFISH; Race up!

20:00 - 21:00

Final

Presentation of the challenge; "Tune up" your roboFISH; Race up!

21:00 - 21:30 (approx.) Welcome Reception

Welcome drink and finger food for networking and interaction

Concurrently



ARTISTIC REALITY IN SCHOOL EDUCATION: ENACTED, REFLECTIVE AND COLLABORATIVE LEARNING WITH THE HUMAN ORRERY SPACE

website: https://aristarchusproject.eu/

Do you know what Human Orrery is? Would you like to know how Human Orrery is used to teach STEAM in primary and secondary education?

Meet Professor Emmanuel Rollinde from CY Cergy Paris Université, France, who will introduce participants to the magical world of astronomy through the Human Clock. More onsite

FRIDAY JULY 8

09:30 – 11:00 Concurrent Plenary Session 2 & Workshop 4

Plenary Session 2

Longing and Belonging: How Educators and Learners Cultivate Community In Real and Virtual Worlds

Moderator: Dr Ġorġ Mallia, University of Malta, Malta

Hall Muses

MODERATING A STUDENT-RUN WEBLOG TO TEACH SHAKESPEARE PLAYS AND HONE CRITICAL WRITING SKILLS

Neville Thomas, University of Malta, Malta

Abstract

This paper explores ways of using a weblog to help post-secondary students critically analyse and write essays on Shakespeare's Othello, and possibly other literary texts, at Advanced Level. The aim of this project is to address certain shortcomings which are often highlighted in MATSEC examiners' post-mortem analysis of exam essays, the most common of which being that "candidates (do) not refer closely enough to the text", "some (do) not quote accurately", "many provide just a paraphrase of the given extract" and "many narrate the plot of the play rather than focus on the extract itself" which results in "very lengthy and long-winded answers".

In addition to this, what made the outcomes of this project more desirable than ever was the fact that the cohort of students used in this pilot-study had just returned to College after two years of online learning. Even before the pandemic, examiners were lamenting the deteriorating levels of English at secondary level in Maltese schools. A 2016 MATSEC report warned "that 16-year old students should be leaving school on completion of their secondary education with a poor command of English

is a matter of great concern" and this, in conjunction with the fact that some students may have suffered from a potential lockdown-related "learning loss", meant that it was imperative to get this project up and running for this particular student cohort (although no studies were conducted in Malta, a UK study found losses of up to two months in literacy in secondary-school students as a result of pandemic-related educational disruption).

I had already used social media, mainly Facebook, in the past to address some of the aforementioned problems. However, a suggestion to get students to conduct their own research and write their own weblog as an alternative to my Facebook page was taken up in order to see if giving them the responsibility to analyse assigned segments of the play, conduct their own research and write their final analysis in the form of an academic essay would help them, and their readers, address persisting problems identified by MATSEC's examiners. As the blog's moderator, I would ensure that what my students produced was up to the desired level before it got published. Other students were encouraged to insert additional notes or observations in the blog's comments section if they felt the need to do so. After the students sat for their A' Level exam, they were asked to fill in a short questionnaire in order to see how their collective effort to collate notes and write them in the form of well-structured paragraphs helped them answer their exam essays.

This paper therefore gives the background to, explores the process of, and collates feedback from students about the literature learning weblog used in a post-secondary classroom.

DIVERSITY IN TEACHER EDUCATION INSTITUTIONS: STUDENT BELONGING, MINORITY AND MAJORITY PERCEPTIONS

Zuhaira Najjar, Arab Academic College for Education in Israel,
Israel

Abstract

This study examined how students of different minority groups in teacher education institutions perceive sociocultural relationships with other groups, whether they feel they belong, and how they perceive being minority or majority within and outside the academic institution. The research paradigm is qualitative phenomenological. The participants were 48 students from different ethnic groups from 7 teachers' colleges.

Findings showed that most participants reported good relationships with students and faculty of different ethnicity, resulting in a deep sense of belonging to the academic institution. Ethiopian and Arab students tend to form social bonds with students of the same ethnicity. Among Arab students, the sense of belonging stems from interacting with colleagues from the same culture, the fact that studies in Arabic colleges take place in their mother language and social and academic support. Among Jewish students, the sense of belonging is mainly related to the involvement in the activities of the college, the friendships and the interaction between them and the lecturers.

The findings show how Arabs and Jews view being a minority versus a majority. Jewish students mostly define the terms minority and majority quantitatively, while Arab students relate to their social meaning and see themselves as a disadvantaged minority outside the academic institution, but a majority in the Arabic college. Overall, the results suggest that colleges for education can achieve supervisory relationships that are detached from the reality in the society. Colleges of education promote a democratic atmosphere and humanistic education and can be described as institutions that allow caring, responsibility and a positive attitude towards others. However, it seems that mere attitude of nurturing and caring alone is not enough and there is also a need for a deliberate policy to encourage interaction between the various groups and to address minority issues.

CALMD: A COMPREHENSIVE KIT FOR SOCIAL INCLUSION OF PEOPLE WITH MENTAL DISABILITIES

Nancy Pyrini and Konstantinos Karampelas, University of the Aegean, Greece

Abstract

People with disabilities, especially people with intellectual disabilities, face many barriers and obstacles in their daily lives, in their personal experiences and in their professional activities (when this is the case). They rarely receive guidance or counselling based on their talents, abilities, preferences and needs. In March 2021, the European Commission adopted the Strategy for the Rights of Persons with Disabilities 2021-2030. The Strategy builds on the results of the previous European Disability Strategy 2010-2020, which paved the way for a barrier-free Europe and for empowering people with disabilities to enjoy their rights and participate fully in society and the economy. Despite progress over the last decade, people with disabilities still face significant barriers and have a higher risk of poverty and social exclusion. The objective of this Strategy is to progress towards ensuring that all persons with disabilities in Europe, regardless of their sex, racial or ethnic origin, religion or belief, age or sexual orientation.

In our project we plan to introduce and integrate new, innovative methodologies from the fields of applied psychology, career guidance, coaching and gamification, which will coexist in an easy-to-use, accessible and inexpensive tool. Our project proposes an itinerary where adults with intellectual disabilities define their personal plans about social life and employment and are guided and empowered through practical tools, which will be adapted to fit the needs of people with intellectual disabilities. The new tools and methodologies will make it easier for people with intellectual disabilities to gain direction, become emotionally stable, make their own choices, become empowered and integrate into the labour market. This will be beneficial not only for the direct beneficiaries but also for their families and society.

A DIGITAL ESCAPE ROOM FOR EDUCATION - GAMIFICATION OF THE SUBJECT "KNOWLEDGE MANAGEMENT" FOR STUDENTS OF INFORMATION SYSTEMS

Heidi Schuhbauer, Sabine Döllfelder, Daniel Rupprecht and Sebastian Würflein, Nuremberg Institute of Technology, Germany

Abstract

Knowledge Management is one subject of the bachelor's degree in information systems at our university. For this subject, a digital escape room was implemented on the platform Moodle. A traditional escape room is a game "where people are locked into a room and have to find a way to escape by finding clues [...] in it, and solving puzzles" [Cambridge Dictionary 2021]. A digital escape room is an online game where tasks have to be solved online to reach a defined goal. Moodle "is an online educational platform that provides custom learning environments for students" [TechTerms 2021].

Questions of this project were:

- Is Moodle a recommendable platform to implement a digital escape room?
- Which contents are suitable to design puzzles for an escape room?
- Are digital escape rooms a reasonable concept to teach knowledge?

A storyline was developed fitted to the target group students. The story started with the invitation to a job interview where a fictive company was introduced. The story guides through the interview phase. However, surprisingly the applicant was left alone in a company room and has to find out of the virtual building. For the implementation of the puzzles, interactive elements of moodle (H5P) were used. There are, for example, virtual tours (360 0) through virtual rooms where clues have to be found. Drag-and-drop tasks, memories, fill-in-the-blank tasks and logical problems have to be solved. Help texts are available

in case the gamer needs some hints. The content of all tasks are learning matter of the subject knowledge management.

Two pilot groups evaluated the online game before it is used already in the main study course. The students liked the online game. They also stated, that the puzzles where difficult and they needed hours to solve it. They had to look into the subject knowledge management. This assists the learning process for those who like quizzes. On the other side, not all subjects can be mapped in online quizzes. The system Moodle has only limited development possibilities for online games. Especially helpful was the option to guide through the game with visibility restrictions.

BREAK THE HABIT: USING AN ACTIVE LEARNING CLASSROOM TO PROMOTE COLLECTIVE REFLECTION IN AND ON ACTION AT THE WORKPLACE

Maria Spante, University West, Sweden

Abstract

Routine and projects had dominated work models for preschool staff in a Swedish municipality. To break such patterns, a process approach was initiated promoting continuous competence development. Organizing practices in the initiative focused on combining language development among the young children with relevant use of digital tools, develop pedagogical models for inclusion of young children at the same time as using digital tools, and furthermore how to develop leadership models to enable the staff to integrate and maintain the process approach in everyday practice.

After two years of continuous effort, the common experience was positive but when trying to present the experience for stakeholders outside of the organization, such as responsible school politicians, there was a frustration linked to the lack of language for the positive experience of professional

development and enhanced organizational quality. Activity theory was used as a point of departure for designing an activity with the aim to collectively moving from the abstract to the concrete in being able to verbalize what the experience was manifested by.

A writing seminar in an active learning classroom (ALC) was created to collectively produce texts for concrete descriptions and specified explanations of the positive learning experience. The result of the writing seminar suggests that the ALC room in combination with the interaction within and between participating groups activated what Engström refers to as Expansive learning, when moving from the abstract notion of success to the concrete articulation of performed activities. Furthermore, the active learning classroom with several large screens and walls to write on was seen as an essential tool supporting the expansive learning in the preschool context when conceptualizing learning. The study conclude that reflective practice needs to be materialized in concrete activities and writing seminars in active learning classrooms is suggested as a spearhead model for such activities.

Workshop 4

Active Digital Citizenship Education and the Role of Teachers and School Leaders in the Development of a Democratic Culture in School in a Digital Age

Facilitator: George Sarrigeorgiou, 3rd Laboratory Center of East Attica, Greece

Hall Bridge

Maximum number of participants: 15

11:00 - 12:00

Philosophers' Cafe (Coffee at Lobby Muses)

Moderator: Dr Ġorġ Mallia, University of Malta, Malta

Hall Muses



The Philosopher's Cafe held during ICICTE 2019

The Philosopher's Cafe is a moderated forum in which the delegates participating in ICICTE come together to discuss the different issues related to educational technology, particularly those that are presented during the conference sessions. We sit in the round, have coffee and talk about issues that are essential to our professional lives.

12:00 – 13:30 Concurrent Session 3 and Workshop 5

Plenary Session 3

Pedagogy, Leadership, and Organizational Change

Moderator: Dr Marcia Håkansson Lindqvist, Mid Sweden University, Sweden

Hall Muses

STRUCTURED FLEXIBILITY WHEN LEARNING ABOUT RESOURCE DIVERSITY ON THE GLOBE: THE DOLLAR STREET CASE

Sylvana Sofkova Hashemi1, Anna Maria Hipkiss, University of Gothenburg

Maria Spante, University West, Sweden

Abstract

The study is situated in a school built specifically with the idea of flexible design in the learning environment providing variation of rooms and furniture combined with access to a range of digital tools to enhance students' 21st century skills. The aim of this study is to investigate how such flexible resources are used and experienced by teachers in practice. The findings demonstrate that teaching in such spatial wholeness requires including flexibility in the planning process and approaching student-driven choices in a meta-structure for students to participate and learn. Teaching *Dollar Street* required extensive collective planning to uphold the shared design throughout the spaces, activities, and resources.

SCHOOL ORGANIZERS EXPAND THE ACCESS AND APPLICATION OF DIGITAL TECHNOLOGIES IN SCHOOLS - A LEADERSHIP PERSPECTIVE

Jussara Reis-Andersson, Mid Sweden University, Sweden

Abstract

The access and application of digital technologies in the educational system are not new and have been going on for the last years. Digital technologies create opportunities for school leaders, teachers, and students, which can be seen as

a positive effect if used correctly. However, the application of digital technologies incorrectly may trigger problems. For example, increasing workload due to non-friendly user interfaces in software and reducing the motivation of using digital technologies in education due to lack of digital competence. Teachers need to get access to digital technologies and digital competence in how they should use these digital technologies in learning and teaching. It is an organisation and leadership issue. At the municipal level, the school organizer and the school leaders are responsible for expanding the access and application of digital technologies in municipality schools. This paper aims to describe and analyse how school organizers work to implement digital technologies in municipality schools and support school leaders' digitalisation work.

Participant observations, group interviews, and surveys have been used to collect the data in three Swedish municipalities. The practice architecture has been used to analyse the collected data. The preliminary findings show that the school organizers' leadership should involve a holistic perspective that enables the gold thread in the municipality schools' digitalization work. They should be able to understand the opportunities and the challenges digital technologies bring to learning and teaching. Further, the findings show that teachers, school leaders, and organizers' digital competence affects how digital technologies are expanded in schools and how they are applicated in teaching, affecting equality in and between schools.

THE EVALUATION OF A HIGHER EDUCATION DISTANCE EDUCATION COURSE

Maria Eugenia Witzler D´Esposito, Faculdade Cultura Inglesa, Brazil

Abstract

This aim of this paper is to present the evaluation process Higher Education Institutions go through in Brazil when offering distance education courses at graduate and post-graduate levels. The paper highlights the main aspects of the legislation, what the accreditation processes entail, presents a graduate course (a teaching qualification), the evaluation instrument, the feedback received, and concludes with some final considerations on the process experienced.

AN ASSESSMENT OF LITERATURE ON THE DIGITAL LITERACY OF LECTURERS IN TURKEY

Şeyma Esin Erben, İstanbul Gelişim University, and Hazal Koray Alay, İstanbul Esenyurt University, Turkey

Abstract

The aim of this study is to present the Turkish digital literacy studies in way in which the digital literacy of the instructors has been evaluated. The study adopted systematic analysis, using a secondary source of data through Google Scholar, DergiPark, and National Thesis Center databases and a subset of 17 studies. These studies focused on digital literacy, educational institutions, lecturers and digital transformation were included in the analysis. The research contributes to the literature as it provides a holistic source with findings on the development of digital literacy of lecturers thereby increasing their academic productivity and performance.

SHELLSHOCKED BY THE PANDEMIC: A PERSONAL ACCOUNT OF REDESIGNING STUDIO ART CLASSES FOR ONLINE DELIVERY Diane Belfiglio, Walsh University, U.S.A.

Abstract

In March of 2020, face-to-face university classes were abruptly changed to online delivery due to the world-wide Covid-19 pandemic. Although this was challenging for all classes, it was particularly challenging for studio art classes, which by their very nature, are a completely hands-on form of learning. This paper will explore the instructional changes, the curriculum

changes, and the institutional changes which I worked through in order to deliver art instruction online. It will further explore the benefits and drawbacks of online delivery in art, and how the hybrid versions of my courses have actually reaped the benefits of adding technology to my newly revised curricula.

Workshop 5 Citizenship Education for Democratic and Sustainable Communities

Facilitator: Nancy Pyrini, PARAGON-eduTech and George Sarrigeorgiou, 3rd Laboratory Center of East Attica, Greece **Hall Bridge**

Maximum number of participants: 15

13:30 – 15:00 Buffet Lunch Restaurant Thalassa

15:00 – 16:30 Workshop

Workshop 6 The Design Dice Model in Practice

Facilitators: Maria Spante, University West and Sylvana Sofkova-Hashemi, Halmstad University, Sweden

Hall Muses

Objectives

We will present the model at site and on a short video, and then participants will "play" with the dice to plan or analyse lectures of their own choice. We will then collectively discuss experiences of the use of the Design Dice.

Methods

Interactive workshop at site and online.

Outline

In this interactive workshop on design for learning using the model of Design Dice, we will explore the Design Dice model, a model that we have developed and used with several teachers in several schools in Nordic countries. The parts of the dice is

- 1) content,
- 2) competences,
- 3) added value,
- 4) room,
- 5) tool,
- 6) time.

Happy faces during the ICICTE 2021 Welcome Reception



How to combine these parts so that the planned work will create added value is at the core of the intentions using the model.

21:00 – 23:00
Welcome Reception
Piano Lobby & Outdoor Pool Area

SATURDAY JULY 9

09:30 – 11:30 Exhibitions, Demonstrations and Poster Session

EXHIBITION AND DEMONSTRATIONS OF ROBOFISHES PROTOTYPES Manuele Silvestrini and Giacomo Fiara, ANcybernetics, Italy

EDUCATIONAL ROBOTICS TO TEACH IOT AND MARINE ROBOTICS AT THE ST. PAUL'S BAY PRIMARY

Mark Azzopardi, St. Paul's Bay Primary, Malta

Abstract

The "RoboPisces Project" aimed at enabling primary school teachers to advance their teaching and technical skills in order to successfully introduce educational robotics in schools. The ultimate goal of the project was to train and guide the teachers through the process of building a fish-robot. The presentation will present the experience and the impact of the project at the St. Paul's Bay Primary.

VRTEACHERS DEMONSTRATION: VIRTUAL REALITY-BASED TRAINING TO IMPROVE DIGITAL COMPETENCES OF TEACHERS

Kalliopi Stavroulia, Cyprus Technological University, Cyprus Nancy Pyrini, George Sarrigeorgiou, Konstantinos Karampelas and Costas Tsolakidis University of the Aegean, Greece Mariano Sanz Prieto, Fundación Siglo22, Spain

Abstract

The coronavirus (COVID-19) pandemic has created an educational crisis, affecting nearly 1.6 billion learners in more than 190 countries. COVID-19 highlighted the urgent need for the digital transformation of Higher Education Institutions (HEIs), and the use of novel and modern technology-based methods in teaching and learning. The current paper presents the VRTEACHER project, which proposes modern digital education responses related to educators' training via novel Virtual Reality (VR) based pedagogical approaches for virtual practicum. The project responds to the need for the digital transformation of higher education and the development of high-performing digital education ecosystems, through the use of VR digital technologies as part of teachers' training methodology.

ARISTARCHUS DEMONSTRATION: ARTISTIC REALITY IN SCHOOL EDUCATION: ENACTED, REFLECTIVE AND COLLABORATIVE LEARNING WITH THE HUMAN ORRERY SPACE

Emmanuelle Rollinde, CY Cergy Paris Université, France Nancy Pyrini, George Sarrigeorgiou, Konstantinos Karampelas and Costas Tsolakidis University of the Aegean, Greece

Abstract

Tremendous achievements of human space exploration in the past 50 years have, and continue to, inspire the younger generation into science and to wonder about our Solar System in particular. Astronomy provides a highly motivating context for learners to develop observational skills, discover methods of scientific inquiry, and explore some of the fundamental laws of physics and concepts of mathematics in both an attractive and meaningful way.

Teaching astronomy in primary school is always a challenge since primary teachers are often more open to literature or traditional disciplines like history, mathematics, art than to STEM with a practical artistic background. In secondary education, teachers are experts in their own subjects only. The provision of a holistic teaching framework aspires to guide them in implementing meaningful STEAM projects.

FAIRY TALE SCIENCE AUGMENTED

Giuseppe Chiazzese, Crispino Tosto, Luciano Seta, Antonella Chifari, Paola Denaro, Doriana Dhrami, Istituto per le Tecnologie Didattiche, Consiglio Nazionale delle Ricerche, Palermo, Italy Anastasia Pyrini, Christos Ioannides, Konstantinos Tsolakidis, Department of Primary Education, University of the Aegean, Rhodes, Greece

Darya Yegorina, CleverBooks, Dublin, Ireland Eleni Mangina, School of Computer Science, University College Dublin, Dublin, Ireland

Abstract

The poster aims at describing aims and activities of the Fairy Tale Science Augmeneta (FAnTASIA) project; the project, still ongoing, has received funding from the Erasmus+ Programme of the European Commission. FANTASIA project aims at developing a multi-lingual educational package for the teaching of some basic scientific concepts and skills to children aged 5 to 12 years. The addressed subjects are the concept of the spherical earth, the concept of the sun, the day/night cycle and the explanation of floating and sinking of solid objects. The use of the educational package will also allow children to learn how to apply the scientific method to evaluate their beliefs concerning the above phenomena.

First, the educational package will be presented. It mainly consists of a book and mobile application powered by Augmented Reality content. The book contains an educational fairy tale that supports children's acquisition of science concepts and skills through storytelling and project-based learning. Augmented reality content, supported by the mobile app, provides to users an additional realistic environment to test and adjust their hypotheses about the studied phenomena; specifically, three

scenarios had been developed to support the learning of the mentioned scientific concepts.

LEARNING OBJECT METADATA AND DISCOVERABILITY OF LITERACY FDUCATIONAL RESOURCES

Georgia Psyrra and Eleni Mangina, University College Dublin, Ireland

Abstract

It is crucial for teachers to use appropriate learning resources to support student learning as well as different variables of student characteristics need to be considered before a teacher comes up with a lesson plan and the resources that will be used to implement it.

Nowadays, more and more Learning Object Repositories (LORs) provide sets of educational learning resources, focusing on different subject areas and providing multilingual content in a variety of formats to students and teachers of all levels of education. Searching Learning Objects (LOs) in such wide collections to support the needs of a specific lecture could be a difficult task. Thus, the content of the LORs is indexed to improve discoverability of LOs to interested parties.

EDUCATORS' AWARENESS FOR XR EDUCATION

Eleni Mangina and Michael Schwaiger, University College Dublin, Ireland

Abstract

The future of education in smart cities is connected with the Metaverse and eXtended Reality (XR) applications. Educators know so little or nothing about helpful digital learning opportunities because they never heard about them during their pedagogic studies. To rapidly change this, European educational institutions join forces to provide answers to questions and help foster digitisation in higher education in

general and promote XR-based Virtual Reality (VR), Augmented Reality (AR) and the combination and further extension of both to Extended Reality (XR) immersive learning in particular. This poster will present the results of the project research involving 324 participants from 26 different countries and highlighting the differences of XR technologies' awareness in Europe.

AN AUGMENTED REALITY VOWEL TRAINER FOR LEARNING ENGLISH PRONUNCIATION FOR PRIMARY SCHOOL STUDENTS Farzin Matin and Eleni Mangina, University College Dublin, Ireland

Abstract

Recently, educational researchers and practitioners have become increasingly interested in new technologies for teaching and learning in language education, including Augmented Reality (AR). In line with this trend, it is also believed to be influential in teaching and learning pronunciation. It is critical to learn the English language at an early age with proper pronunciation in order to communicate effectively. A vowel is a sound that forms a syllable when paired with a consonant. Vowels are very important as they can be found in every syllable of every word in the English vocabulary and understanding the vowel sounds is highly linked with reading skills. In this study, we developed and experimented with the vowel trainer, which is an augmentation to allow a user to be assessed on the pronunciation of selected 3D learning objects and provided with meaningful feedback.

The users of this study are schoolchildren between the ages of 9 to 12 years old that are having difficulties learning to read and spell. In vowel trainer, each user selects from the options of student and teacher. The Teacher selects which objects the student can choose from, while the student receives a score from Soapbox API on their attempt after selecting an object. The Teacher then receives a more detailed analysis of the student's attempt. By motivating students to learn, interact and

make the learning process more effective, the educational process is more effective. The aim of this research is to help the students, teachers and parents to learn and enhance the learning process. The audience at the poster presentation will have a hands on experience with Microsoft HoloLens 2 of the vowel training through MirageXR.

THE EUROPEAN HEART PROJECT: STRENGTHENING DEMOCRATIC SKILLS ON THE BASIS OF BASIC HUMAN NEEDS

Susanne Linde and Klaus Linde-Leimer, Blickpunkt Identität, Austria

Monika Gigerl, University College of Teacher Education Styria, Austria

Pantelis Balaouras, GUnet, Greece

Tilemachos Raptis and George Sarrigeorgiou, Directory of Secondary Education of East Attica, Greece

Eliane Sagodira, LP Julien De Rontaunay, France

Abstract

When one or more of our basic needs is not met or is threatened, we react with discomfort. This discomfort manifests itself in unpleasant feelings. Unpleasant feelings move us to act in order to regain emotional balance. In the course of our lives, we develop behaviours and strategies with which we react to unpleasant situations. But these strategies are not always appropriate, i.e. suitable to fulfil our threatened basic need.

Many misunderstandings, problems and conflicts arise because people use inappropriate behaviours or strategies to get their unpleasant feelings back under control. In order to learn to establish adequate behaviours and strategies in time, it is important to start as early as possible to perceive one's own basic needs and to recognise when they are unfulfilled or threatened.

People can understand and support each other much better at the level of needs than at the level of strategies. Based on these considerations, innovative competence-oriented materials for democracy education are being developed by the partnership of the European Heart project for use in schools (secondary levels1 and 2). The products are suitable for bridging cultural, religious and political diversity of pupils, reducing the propensity for violence in classes and thus significantly facilitating class management. Existing conflicts can be addressed and viewed on a completely new level and no longer have to be "swept under the carpet", as the method has a de-escalating and connecting effect.

The tools for non-violent conflict resolution can be used not only in the classroom, but also within the teaching staff and as an instrument of quality assurance within the framework of school development. In working on the topics, the diversity within the classroom should be consciously used to develop an own understanding of democratic values, participation and personal responsibility.

CLIMATOPIA: COMICS, LITERATURE & GAMIFICATION FOR CLIMATE CHANGE IN SECONDARY/PRIMARY EDUCATION

Linda Daniela, University of Latvia, Latvia

Susanne Linde and Klaus Linde-Leimer, Blickpunkt Identität, Austria

Nancy Pyrini, George Sarrigeorgiou, Konstantinos Karampelas and Costas Tsolakidis University of the Aegean, Greece Mariano Sanz Prieto, Fundación Siglo22, Spain

Abstract

Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, Europe needs a new growth strategy that will transform the Union into a modern, resource-efficient and competitive economy, where - there are no net emissions of greenhouse gases by 2050 - economic growth is decoupled from resource use - no person and no place is left behind (EC, A European Green Deal). Environment and climate action are key priorities for the EU now and in the future. The European Green

Deal Communication 3 is the European new growth strategy and recognises the key role of schools, training institutions and universities to engage with pupils, parents, and the wider community on the changes needed for a successful transition to become climate neutral by 2050.

According to UNESCO, "education is critical in helping populations understand and address the impacts of climate change, and in encouraging the changes in attitudes and behaviour needed to help them address the causes of climate change, adopt more sustainable lifestyles and develop skills that support different modules of economies, as well as to adapt to the impact of climate change". UNESCO promotes climate change education (ECC) as part of its Global Action Programme on Education for Sustainable Development (ESD). Education for sustainable development is a component of the fourth sustainable development goal on education.

Goal number 13 on climate action targets the improvement of education on climate change. Indeed, education is about teaching young generations to understand and reflect on the physical and social world surrounding us so that they become citizens able to think critically, participate in decision making and take action. Climate change education is therefore also citizenship education. Since September 2020, UNESCO focuses on key issues related to the new global framework ESD for 2030 and the relevance of ESD during and beyond the Covid-19 pandemic to 'build back better'. Around the big questions such as 'what world do we want to live in beyond Covid-19?', 'what is necessary to rebuild and recover in a more sustainable and equitable way and not fall back into unsustainable habits and structures?' and 'what role does education and particularly ESD play and how does it contribute to the transformation needed?'. Education on climate change is grounded in science – but it is also about behaviour and action. It is about the environment and economy, but also about equality and social organisation.

It promotes future citizenship that is environmentally and socially responsible on a global scale (Eurydice, 2019).

To address this challenging priority, Climatopia builds on the expertise of two European Universities with pedagogical expertise, one network with expertise in human needs, the Hellenic National Centre for Scientific Research "Demokritos" and one technology expert to support pupils to provide answers to the above questions. The Climatopia project aims at developing educational materials and teaching methods to be included in school settings, initial and ongoing teacher training settings and will also be communicated and discussed widely in the communities.

The concrete objectives of Climatopia are to: - develop the pupils' scientific knowledge and green skills on climate change using comics and a - serious game (Learning to Know) - effectively apply the knowledge acquired in the context of a simulation, decision-making game (Learning to Do) - provide 'designed experiences' where players can learn through doing and being, rather than absorbing information from readings and traditional lecture formats (Learning to Be) - design highly engaging learning experiences that allow players to build empathy by taking on various roles and perspectives (Learning to Live Together) - envision oneself in the future and seeing consequences of actions at different points in time. (Learning to Transform Oneself and Society).

EMPOWERING WOMEN'S ENTREPRENEURIAL AND DIGITAL SKILLS: THE BLOSSOM PROJECT

Kalliopi Evangelia Stavroulia and Kalia Demetriadou, Growth Consultants, Cyprus

Abstract

Women have been deeply affected by the COVID-19 pandemic, while they face more difficulties than men in re-

entering the labour market or start a new business. Women face several barriers including gender-based stereotypes, lack of training opportunities, lack of support that harshen their battle of becoming entrepreneurs. The BLOSSOM project aims to empower women's entrepreneurial skills focusing on literacy, numeracy and digital skills that are crucial for women's personal and professional development and sustainability in the field of entrepreneurship.

The BLOSSOM project aims also to strengthen women's motivation and confidence, encouraging them to design business projects that could become viable and sustainable businesses in the future.

11:30 – 12:00 Coffee Break Lobby Muses

12:00 – 13:30 Round Table Discussion

THE EVOLUTION OF DEMOCRACY TOWARDS MORE PARTICIPATORY AND INCLUSIVE EDUCATIONAL COMMUNITIES

Moderator: Nancy Pyrini, PARAGON-eduTech, Greece Rapporteur: Professor Monika Gigerl, University College of

Teacher Education Styria, Austria

Hall Muses

12:00 - 12:15

Thinking of New Ways to Strengthen Democracy

Guest Speaker: George Papandreou, Former Prime Minister of Greece, Chair of the sub-committee on Democracy, Committee on Political Affairs and Democracy of the Parliamentary Assembly of the Council of Europe

12:15 - 12:30

Celebrating the 75th Anniversary of the Universal Declaration

of Human Rights (UDHR): Toward 2023—in Awareness, Inquiry, Action, and Advocacy (The Most Translated Document in the World)

Guest Speaker: Professor Emerita Marcie Boucouvalas, Virginia Tech, USA

12:30 - 12:45

Child Rights Education: A Vision for the Future

Guest Speaker: George Simopoulos, Education Specialist, UNICEF Greece

12:45 - 13:00

Lessons Learnt from the European-Heart Project

Coordinator of the EU-Heart Project: Susanne Linde, Blickpunkt Identität, Austria

13:00 - 13:10

Participants will have a few minutes of quiet reflection to read through their notes and brainstorm questions and ideas to share with their peers. Moderated discussion will follow on the challenges that have been presented.

13:10 - 13:30

Questions and Answers

13:30 - 14:30

Plenary Session 4

Plenary Session 4

Full STEAM Ahead: Science, Technology, Engineering, the Arts, and Math Education

Moderator: Zuhaira Najjar, Arab Academic College for Education in Israel, Israel

Hall Muses

AN INNOVATIVE APPROACH TO EARLY CHILDHOOD STEAM EDUCATION BASED ON THE FANTASIA PROJECT: "SUN, WHERE ARE YOU GOING?"

Voula Marantou and Xenia Mastromichali, Rodion Pedia Kindergarten, Greece

Abstract

In this presentation we present the activities and results of the Erasmus+ KA201 STEAM Project "FAnTASIA", which were carried out from January to May 2022 with the goal of using educational material to teach some basic scientific concepts and develop skills. In particular, the following are presented: the activities, the printed material, the experiments, the audiovisual material, the results of the questionnaires that explored the children's perceptions before and after the implementation, as well as a summer theatrical performance that was based on the assumptions made by the children throughout the project. The intervention aims to support teachers and parents to help children overcome difficulties in specific scientific concepts such as: the shape of the earth, - gravity, the alternation of day and night, the movements of the earth - magnetic force, satellites, flotation, and immersion. A major challenge of our project was to transform the material so that it would appeal to preschool children.

ENHANCING ENTREPRENEURIAL SKILLS OF PRIMARY STUDENTS THROUGH TECHNOLOGY-BASED LEARNING APPROACHES: THE DIGITALIS PROJECT

Kalliopi-Evangelia Stavroulia and Kalia Demetriadou, Kalys Solutions, Cyprus

Abstract

Entrepreneurial skills are core life skills that can be learned. The cultivation of entrepreneurial skills in primary students could lead to future generations of innovators and green entrepreneurs leading to economic growth. This paper presents a novel

training approach developed under the DIGITALIS project targeting the cultivation of entrepreneurial mindsets in primary students through a combination of in-class activities enhanced with a dedicated serious game and online visits from active entrepreneurs. Entrepreneurs were actively involved in the training activity, acting as role models, and inspiring the students toward entrepreneurship, while the serious game enhanced students' digital skills, allowing the student to practice the theory learned.

IS THERE AN "A" IN STEAM? THE ART PROJECT

Mariano Sanz Prieto & Gema de Pablo González, Fundación Siglo22, Spain

Abstract

STEAM projects are in vogue, with a large number of countries promoting the development of STEAM projects, but mainly related to science, technology and mathematics. We are moving, therefore, in the STEM world. The ART project also aims to work with technology, through the use of Virtual Reality, but using it to make Art and Culture more inclusive and accessible. Through the use of Virtual Reality glasses, young school children can access museums, churches and buildings of different cultures existing in different countries of the European Union. Technology to develop digital skills and introduce schoolchildren to a rapidly changing target world, and technology to work on cultural diversity, acceptance of difference and knowledge of Europe's cultural richness. Developing European citizenship through art and virtual reality.

ECO-CENT: INNOVATION ECOSYSTEMS FOR CIRCULAR ECONOMY ENTREPRENEURS

Nancy Pyrini, George Sarrigeorgiou, Konstantinos Karampelas and Costas Tsolakidis University of the Aegean, Greece

Abstract

On 4 March 2019, the European Commission published a

report on the implementation of the Circular Economy Action Plan. The report presents the main achievements under the Action Plan and sketches out future challenges to shaping our economy and paving the way towards a climate-neutral, circular economy where pressure on natural and fresh water resources as well as ecosystems is minimised.

The European Green Deal, the Sustainable Development Goals and the EU Digital Strategy set the backdrop for future social and economic developments in Europe. The shift from traditional linear models of consumption to more sustainable models of business planning and consumerism offers untold opportunities for new business development, and for existing

businesses to adapt their business models and practices to ensure that they are moving with the wave of sustainable transition that is sweeping across European economy and society. The challenges and opportunities associated with the move towards a circular economy have led to a strengthened emphasis on innovation as a key driver for sustainable economic development. Innovation is essential for the growth of modern societies and it is also central to achievina economic and social development. While innovation is generally recognized as critical to the continuous improvement of education...it is not yet systematically part of education policy development (OECD 2014 Measuring Innovation in Education) and the dynamics of innovation in education remain to be fully understood. While it is accepted that the analysis of innovation from a systemic perspective has been limited in the field of VET (OECD 2014) if the contribution of VET to innovative societies is to be improved, and if VET is to be able to meet the needs of emerging trends like the circular economy, then VET systems and providers themselves need to develop a culture of innovation and creativity. The inherent characteristics of the economy - namely that it is market driven and flexible, and therefore rapidly adaptable to change, as well as entrepreneurial and innovative - are precisely the qualities that are often lacking

in public training systems (OECD 2014) and this is particularly the case where VET in the partner countries is concerned. To preserve valuable natural resources for future generations and conserve biodiversity, active support for a circular economy transition is required and iVET and cVET has a pivotal role in supporting that transition.

Global strategies to achieve a circular economy often overlook the contributions of smaller, locally-led enterprises and the need for market-based solutions specific to emerging economies. Most mainstream business models operate the "take, make and dispose" way of production and consumption and this is reflected in the vast majority of entrepreneurship or business development training resources.

The ECO-CENT project will support the transformative potential of business models driven by social, economic and environmental sustainability objectives. It will be designed for entrepreneurs and business owners committed to adopting business models premised on up-cycling and re-cycling, resource efficiency, and ensuring valuable resources are not simply discarded but live on in innovative products and services. By adopting innovative business models, these entrepreneurs and business owners will contribute to a more circular global economy.

The ECO-CENT project aims to respond to these needs of iVET and cVET providers and members of the business community by providing targeted training both to businesses on circular business models, and to VET trainers to support their continuous professional development in this domain. To bring innovation to the forefront of VET provision in each country, ECO-CENT partners will also form local synergies between VET professionals and business representatives to develop an innovation ecosystem to support both parties to contribute to the green transition of Europe.

14:30 – 16:00 Buffet Lunch Restaurant Thalassa

16:00–17:00 Closing Celebration

RoboPisces Schools' Contest Award

Professor David Scaradozzi. Dipartmento di Ingegneria dell' Informazione, Università Politecnica delle Marche, Italy Professor Konstantinos Tsolakidis, University of the Aegean

Friend of the Conference 2022

Nancy Pyrini, ICICTE Founder and Director

Announcement of ICICTE 2023

Professor Konstantinos Tsolakidis, University of the Aegean

Closing Remarks

Marcia Håkansson Lindqvist, Chair of the Communications Committee Ġorġ Mallia, Chair of the Scientific Committee

20:00 – till late Closing "Greek Night" Dinner Alexis 4 Seasons Restaurant, 33 Aristotelous, Medieval Town website: https://www.alexis4seasons.com/





Sunday, July 10

Lindos, a striking jewel on the east side of the island, brags of its history. Above the modern town rises the Acropolis of Lindos, a natural citadel which was fortified successively by the Greeks, the Romans, the Byzantines, the Knights of St John and the Ottomans.

This makes the site difficult to excavate and interpret archaeologically. The Acropolis offers spectacular views of the surrounding harbours and coastline. The narrow cobbled streets take you to the elegant town, filled with small restaurants and cafes offering a fantastic view of the castle and the sea from their terraces, while the fine-sand beach on the rim of Lindos invites you to try some of the warmest waters in the Mediterranean.

Programme

10:30: Pick up from Mediterranean Hotel (approximately an hours drive). **Selfie Time!** A 5 minute stop on the way to take a panoramic photo of Lindos. We then have the possibility to go up the hill straight to the Acropolis of Lindos for a guided tour There will be some free time around the village. Swimming is possible and recommended **17:00**: Departure from Lindos. On the way, a 10 minute stop at St. Paul Bay for panoramic photos. **18:00**: Return to the Hotel. **Tickets:** Trip price: €20; Admission to Archaeological site - Full: €12, Reduced: €6



