Active learning through improved interactivity

1. Newsletter

June 2021

Partners:

About the project:

Name: Active learning through improved interactivity – ALTII

Project number: 2020-1-HR01-KA226-SCH-094735

Duration: 03/01/2021 – 02/28/2023

Target group: teachers, subject teachers, high school teachers

Project coordinator: Aquilonis d.o.o.

Web page: https://altii.online/

Facebook page: https://www.facebook.com/ALTII-112107737591633

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ALTII

Although for many years there has been a growing awareness around the world of the necessary essential changes in education systems, there is no consensus on what or how to do. However, the dominating belief stemming from cognitive and constructivist learning theories, is that students' needs should be placed at the center of the learning process. Despite this, active learning is still not as common in practice as it should be. It is necessary to **change passive lectures into interactive ones**, which will start a more active role of students in the educational process.

This project proposes the development of an **innovative tool to encourage interactivity in the lecture AudIT** that will have properties not found in the currently available knowledge testing and interaction tools. It will combine known properties and adapt them to the needs of students and teachers. Innovative features such as scoring unique answers, the ability for students to respond simultaneously both anonymously and under their own name, the ability to direct answers to any application such as mind maps and games will significantly raise students' motivation to actively participate in the lecture.

The partner schools in the project will create a **core of 50 experienced practitioners** who will create **methodological guidelines** for potential beneficiaries to give them concrete examples of knowledge and ideas on how to apply interactivity in their own teaching and classes.
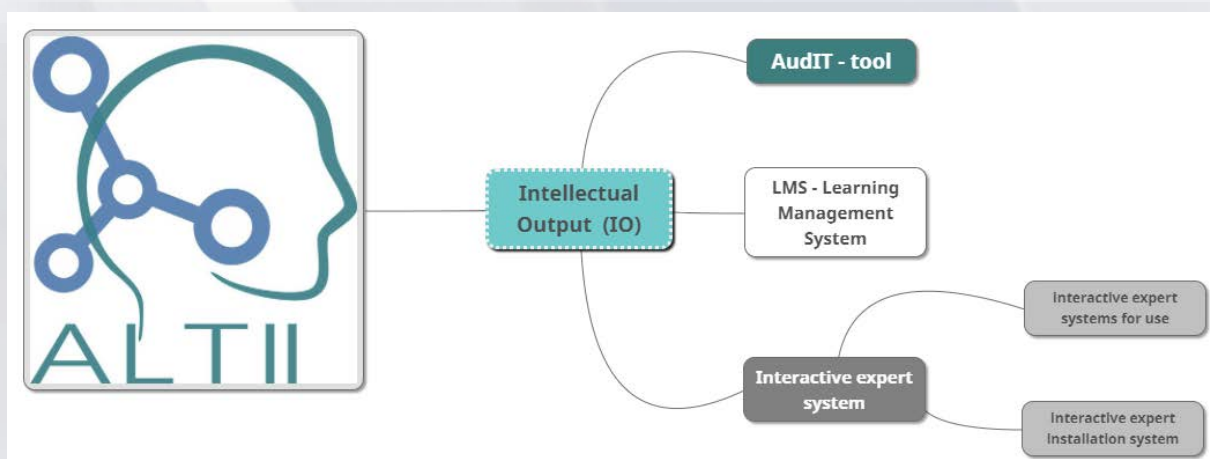
To make it easier for teachers to use AudIT, the consortium partners will also develop an **LMS (Learning Management System)** with methodological instructions and examples. The LMS system will be designed as self-learning material and will provide teachers with additional education and ideas on how to improve interactivity in the classroom with the use of AudIT.

Project partners

Aquilonis d.o.o. (coordinator, Zagreb, Croatia)

Aquilonis d.o.o. was founded in 2005 as the first Croatian company specializing in knowledge management. Aquilonis has designed, developed and implemented a number of projects in the field of ICT application in education. The key features of Aquilonis' teaching methodology are: active student participation, solving real problems, and strengthening what is learned during and after education.

Faculty of Electrical Engineering and Computing (partner, Zagreb, Croatia)

University of Zagreb, Faculty of Electrical Engineering and Computing (FER) is the largest technical faculty and the leading educational and research institution in the field of electrical engineering, information and communication technology, and computing in the Republic of Croatia. Currently, FER participates in 220 projects, both EU and national, funded by various grant schemes.

The Anton Martin Slomšek Institute (partner, Maribor, Slovenia)

Anton Martin Slomšek Institute was founded in 1995. The Anton Martin Slomšek Institute contains several organizational units to achieve its purpose: AMS Gymnasium, Montessori Nursery, AMS Student Dormitory, AMS Music and Ballet School of Music and the Intergenerational Academy.

Secondary School of Economics and Gymnasium Maribor (partner, Maribor, Slovenia)

Secondary School of Economics and Gymnasium Maribor has about 450 students and 40 teachers. SES-MB is a vocational school and gymnasium focused on entrepreneurship. 25 years ago, as the first school in Slovenia, they launched a virtual company, which is now the standard for all economic schools in the country. The second focus of the school is the development of active and digital civic competence in students and teachers.

Tartu Kutsehariduskeskus (partner, Tartu, Estonia)

Tartu VEC is actively involved in many international projects in the field of innovation transfer, student and staff mobility, improving cooperation in the WBL and strategic partnership funded by the European Union's Erasmus +, Nordplus and Interreg programs. Annually, about 130 students go on exchange abroad, and they also receive about 100 students from partner schools. Approximately 60 staff members participate in international cooperation and learning activities abroad each year.

Activities

Kick of meeting

On March 31, 2021, an introductory meeting was held - "KO meeting" of the ALTII project. Due to epidemiological recommendations and limitations, the meeting was held online. The meeting was attended by all project partners and a representative of the Agency for Mobility and EU Programs - Ms. Ana Kunović Roca. At the introductory meeting, the emphasis was placed on explaining the goals and implementation of the project, deadlines and expected outcomes.

Project partners were presented with the technological basics of the project and a detailed action plan for the upcoming quarter. In a motivating working atmosphere, 4 hours of introductory meeting flew by and the foundations were laid for an excellent future collaboration on the ALTII project.

Working together on an intellectual output

Work on the IO of the ALTII project is organized through joint workshops where consortium partners coordinate activities around each segment of work.

Workshop 1 – ICT Interactivity Tool Workshop - O1.A1.1

In preparation for the workshop, the partners had the task to try out at least one tool for collecting feedback at the lecture and to present the functions of this tool. The tools that the partners tried and presented in the workshop were: Vevox, Mentimeter, Socrative, Aha Slides, Quizziz and Kahoot. Professor Predrag Pale gave an interactive lecture on the characteristics and disadvantages of live or online lectures at the workshop. Assistant professor Juraj Petrović gave a lecture on feedback tools at the lecture as well as a lecture in which he reminded the partners of the main functions of the AudIT tool as defined in the project application. In the discussion with the participants, this set of functions was extended to some others suggested by the participants.

Workshop 2 - User Interface Verification Workshop - O1.A1.5

In preparation for the workshop, project partners had the task to use in their practice some of widespread tools that can be used to increase the interactivity of teaching (O1.A1.2). The following tools were tested: Aha Slides, Kahoot, Poll Everywhere, Mantimeter, Polly and MS Teams. In addition, for the preparatory task, project partners had to test the user interface of the mockup version of the future AudIT tool and prepare feedback on it. Project partners presented their experiences and conclusions on the desirable properties of the user interface of the future tool, and through the discussion that followed, the desirable properties of the user interface of the AudIT tool were defined (O1.A1.3). Professor Predrag Pale also gave an interactive lecture on user interfaces at the workshop, through which participants were introduced to the concepts: user experience, cognitive system model, affordability, signifiers, mapping, accessibility.

Workshop 3 - Interactivity workshop and defining the structure of interactivity self-learning materials - O1.A2.1

In preparation for the workshop, project partners had the task of preparing a 5-10 minute presentation that is otherwise included in their curriculum, and which is challenging for students to master. Within the workshop, Professor Predrag pale gave a lecture on learning in the context of cognitive theories of learning with an emphasis on the Theory of Cognitive Load and the Cognitive Theory of Multimedia Learning. These theories have been used as a context for interactivity, its importance, and role in knowledge acquisition. In the discussion that followed the lecture, project partners discussed their vision of interactivity. Project partners held their own presentations and within each discussed the elements for interactivity they use. Based on the workshop, the partners reached a common understanding of the concept of interactivity, which is a prerequisite for further activities to define the related needs of students and teachers (O1.A2.3) and the development of methodologies to support interactivity (O1.A2.4).

Workshop 4 - Workshop on harmonization the needs of teachers and students - O1.A2.3

In order to identify and harmonize the needs of students and teachers related to interactivity, workshop O1.A2.3 was held. As part of the workshop, Professor Predrag Pale gave a lecture in which he reminded the partners of the project objectives and outlined the basic structure of needs related to interactivity in teaching from the perspective of teachers and students. In the joint discussion, all partners contributed to the proposed needs structure which will help them in its further elaboration for activity O1.A2.2.

In the continuation of the lecture, Professor Pale reminded the partners of the most important features of teaching methodologies whose development partners should approach within the activities O1.A2.4. Marija Vurnek, on behalf of the project coordinator Aquilonis d.o.o, has prepared templates that will facilitate the further elaboration of the needs of students and teachers and a form for the elaboration of the methodology.

Partners together in project promotion
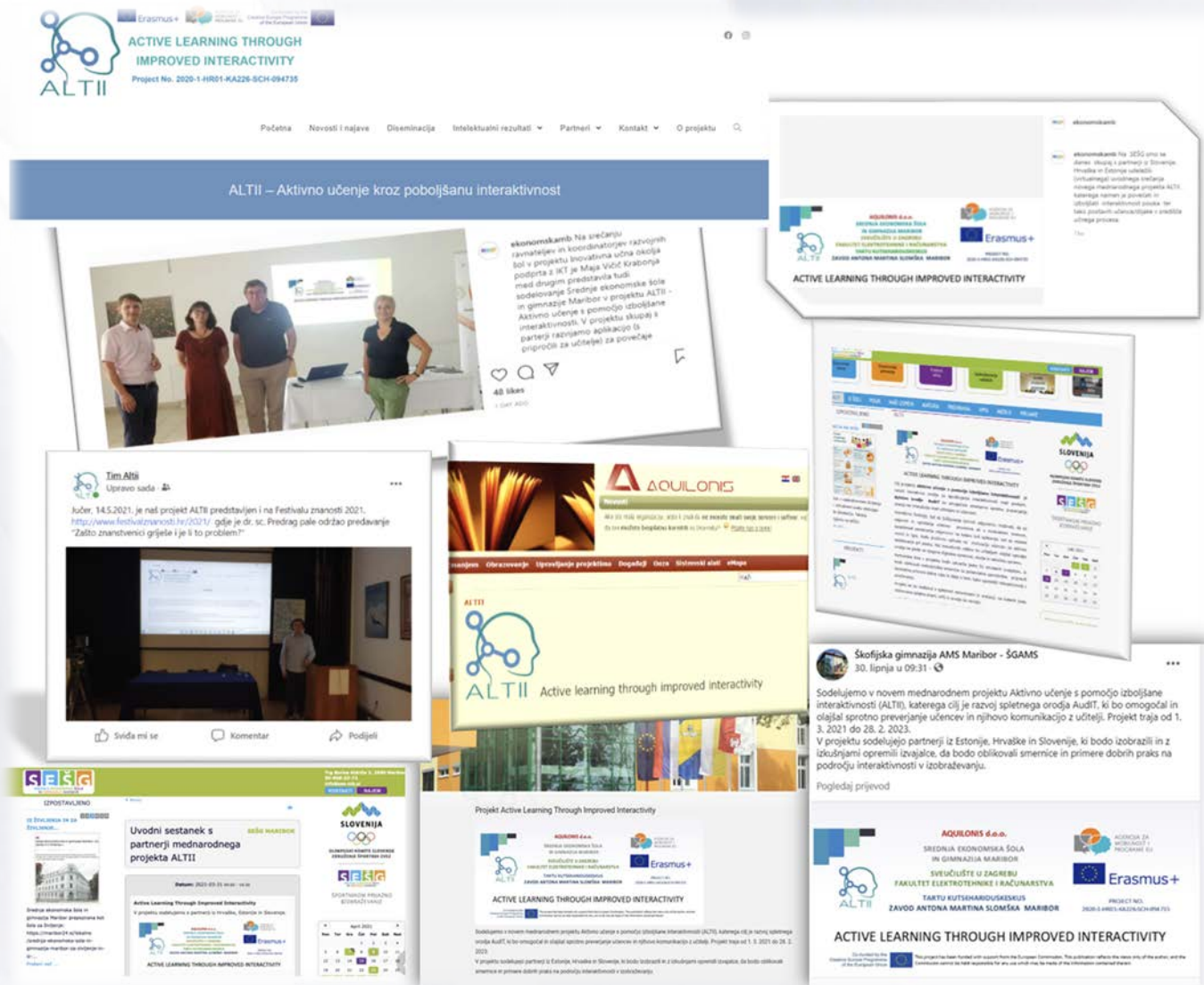
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