Univerza v Ljubljani

Center UL
za uporabo IKT
v pedagoškem procesu

EVALUATION OF BLENDED LEARNING WITHIN MOODLE WITH SAMR MODEL

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ABOUT US

Dissemination:

- Teachers teaching teachers **conferences** - 8 events, number of participants: > 640

Trainings:

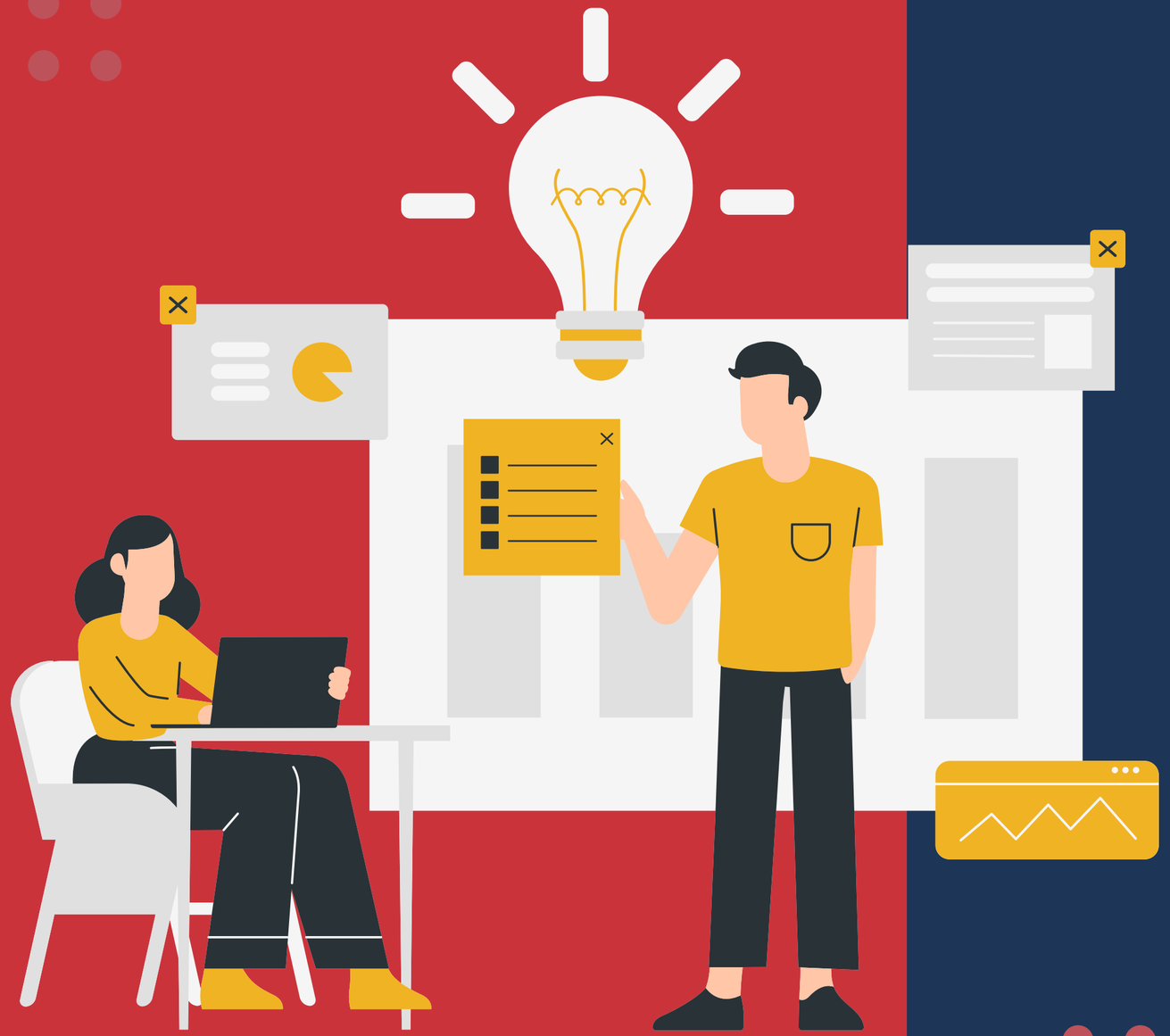
- **Online workshops** - 91 workshops, number of participants: > 480
- **Webinars and live workshops** - more than 230 webinars or live workshops, number of participants: > 3300

Consultations

- **One-on-one**: more than 970 consultations, number of participants: > 680
- Established community of **multiplicators**: 56 educators
- Established community of **integrators**: 35 educators

Development and research:

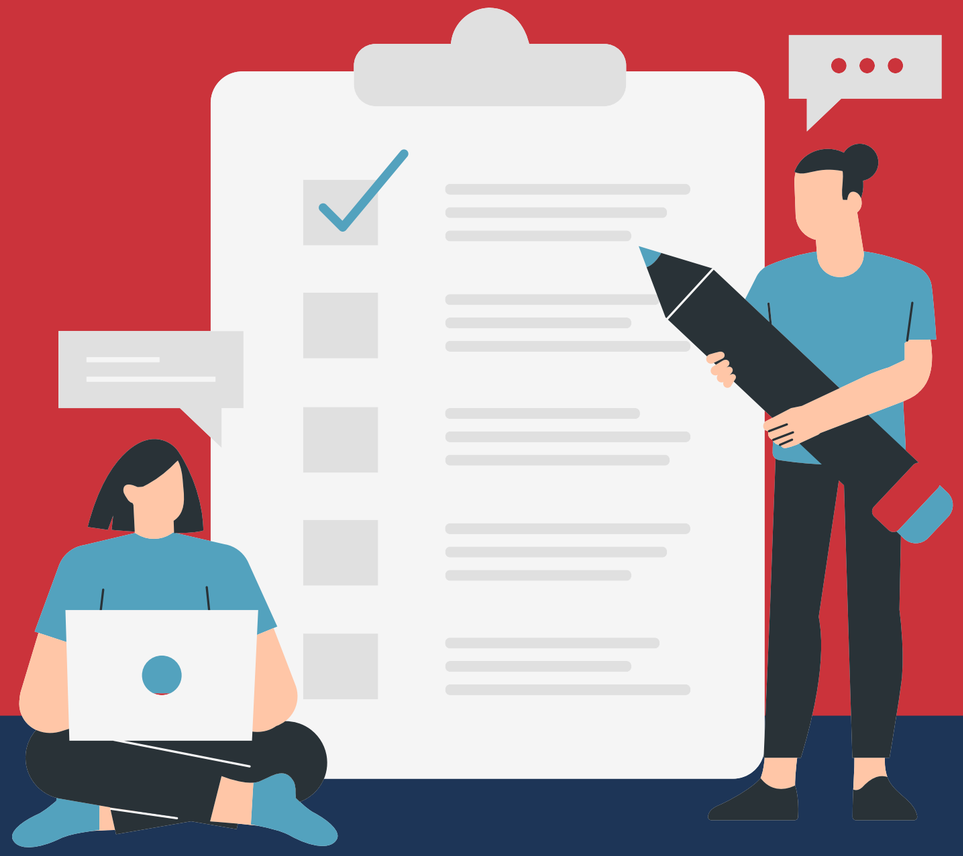
- **Pilot projects**: 149 updates of study subjects with ICT didactic use conducted/in progress
- **One-year projects** to introduce innovative pedagogies
- Development of **materials** > 490 materials
- Maintenance of **online classrooms**: for 6 members of UL
- **Integrated study environment**



BACKGROUND ON BLENDED LEARNING AND MOODLE

- Definition of blended learning
- Benefits of blended learning
- Moodle as a learning management system
- Integration of technology in Moodle
- Adaptability to diverse learning styles

IMPORTANCE OF EVALUATING BLENDED LEARNING INITIATIVES



- Enhancing instructional design
- Identifying barriers and challenges
- Enhancing student engagement and satisfaction
- Supporting evidence-based decision making
- Advancing blended learning research and practice

REDEFINITION
Technology allows for the creation of new tasks, previously inconceivable

MODIFICATION
Technology allows for signiticant task redesign

AUGMENTATION
Technology acts as a direct substitute, with functional improvement

SUBSTITUTION
Technology acts as a direct substitute, with no functional change

SAMR MODEL

Benefits of using SAMR model in pedagogical process:

1. **Impact on teaching and learning**
It encourages educators to aim for the higher levels of modification and redefinition, where technology enhances critical thinking, creativity, collaboration, and problem-solving skills.

2. **Promoting student-centered learning**
As technology integration progresses from substitution to redefinition, it fosters active engagement, personalized learning, and opportunities for students to take ownership of their learning.

3. **Continuous improvement and reflection**
Educators can evaluate their current practices and strive for higher levels of technology use, aiming to transform learning experiences and maximize the benefits of technology in blended learning environments.

CASE STUDY:
Implementing Blended Learning within Moodle at the University of Ljubljana

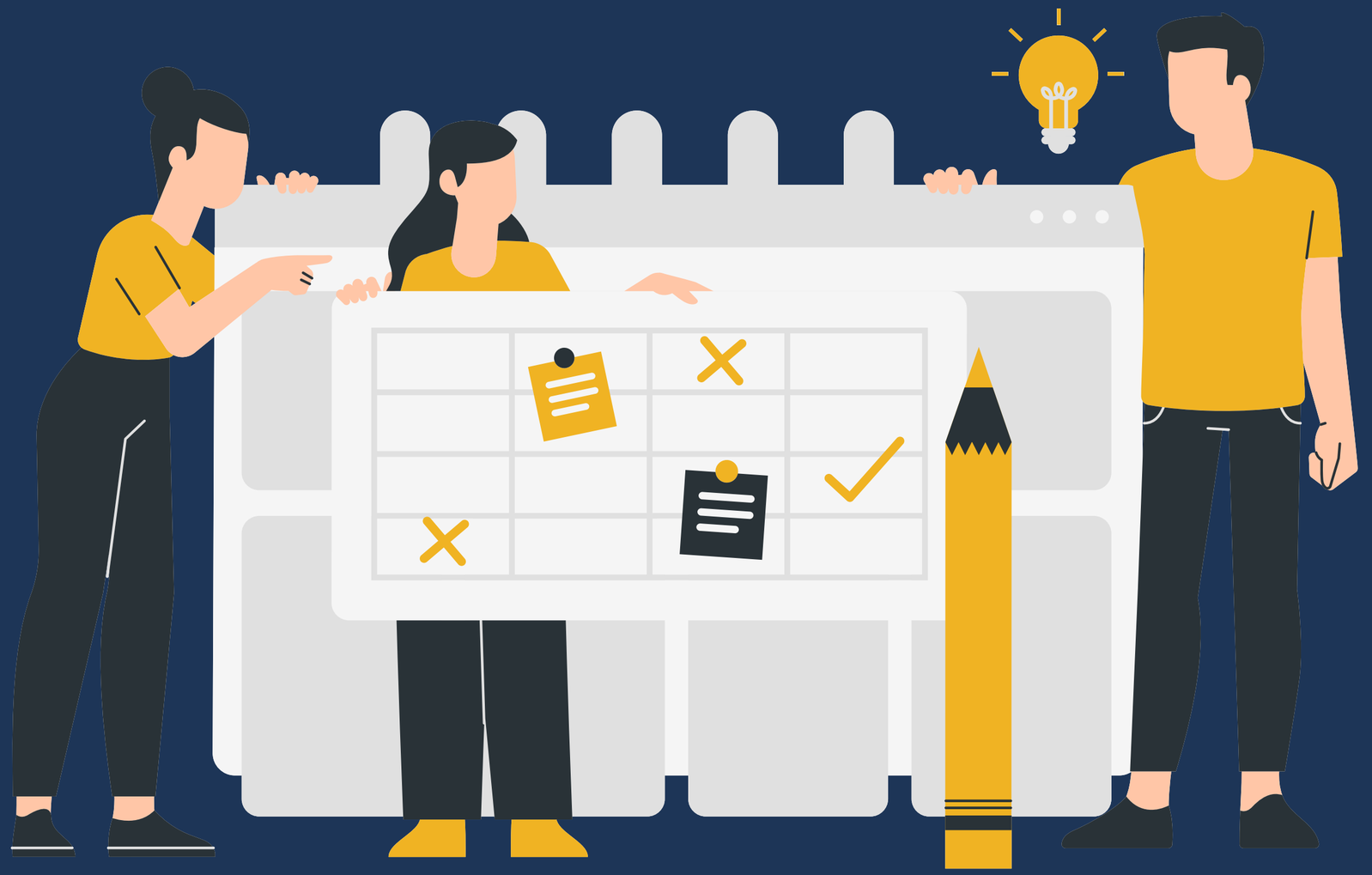
1. **SAMPLE**
   - 149 courses

2. **DATA COLLECTION**
   - Report on the pilot “update" of the course
   - Between October 2021 and June 2023

3. **DATA ANALYSIS**

Mid-term analysis of students' activities in the submitted reports in terms of didactical approach used, SAMR level of integration of ICT (Moodle) in the pedagogical process

RESULTS



SUBSTITUTION

1. **ASSESSMENT**

   Students complete online quizzes or assessments instead of traditional pen-and-paper tests.

2. **COMMUNICATION**

   Students engage in online discussions, sharing their thoughts, asking questions, and responding to their peers.

3. **SUBMISSIONS**

   Students submit their assignments electronically through Moodle's assignment module instead of physically submitting printed copies.

4. **REPOSITORY**

   Instructors can upload digital versions of course materials, lecture notes, or supplementary resources, making them easily accessible to students at any time.

5. **MESSAGING**

   Students can send private messages to instructors within Moodle, seeking clarification on course content, asking questions, or discussing their progress.

AUGMENTATION

1. **INTERACTION**

Students can watch instructional videos within Moodle to reinforce concepts or engage with interactive simulations to deepen their understanding of complex topics.

2. **COLLABORATION**

Students can work together on group assignments, co-create content in a wiki, or engage in online discussions focused on collaborative problem-solving.

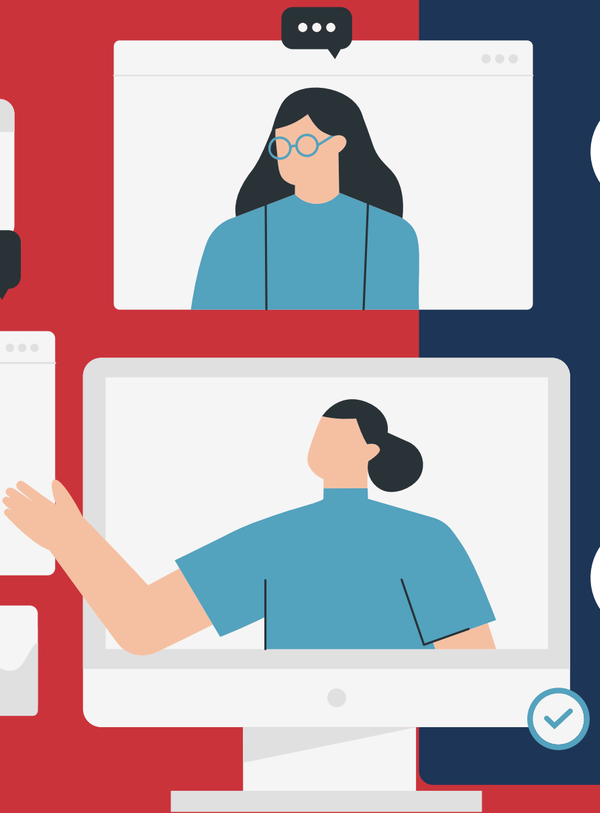
3. **ASSESSMENT**

instructors can create interactive quizzes with multimedia elements, such as embedded images or videos, to provide a more engaging assessment experience.

4. **FEEDBACK**

Instructors can provide timely and personalized feedback to students by using Moodle's grading rubrics, annotations, or audio feedback options.

MODIFICATION



1. **PROJECTS**

Students can work on a collaborative project within Moodle. They can use various Moodle tools, such as discussion forums, wikis, and file sharing, to plan, execute, and present their projects.

2. **CREATING DIGITAL CONTENTS**

Students can create a multimedia presentation or a digital portfolio using Moodle's integrated tools.

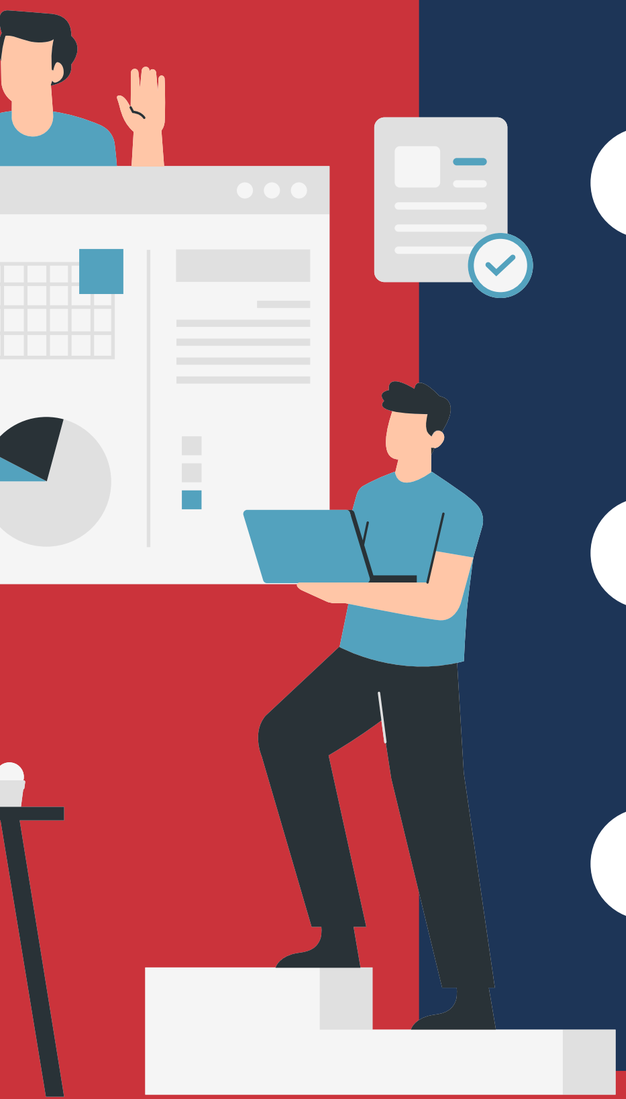
3. **PEER REVIEW**

Students can submit their work, and Moodle can automatically assign peer reviewers. This modification enables students to receive multiple perspectives and constructive feedback on their assignments, fostering a collaborative and iterative approach to learning and improvement.

4. **COLLECTIVE KNOWLEDGE CONSTRUCTION**

Students can contribute to a shared database, adding new entries, sharing resources, or discussing key concepts.

REDEFINITION



1. IMMERSIVE LEARNING

Instructors can provide access to immersive virtual simulations or VR environments that allow students to explore and interact with complex concepts in a realistic and engaging manner.

2. VIRTUAL DEBATES

Instructors can facilitate virtual debates or moderated forums where students from different locations can participate, share perspectives, and critically analyze complex topics.

3. VIRTUAL LABORATORIES

Students can interact with virtual equipment, conduct experiments, collect data, and analyze results within Moodle.

4. DIGITAL CONTENT CREATION

Students can create and publish their own multimedia-rich digital artifacts, such as e-books, interactive presentations, or websites.

FINDINGS

STUDENTS:

- positive effects on student performance
- increased student engagement and satisfaction
- skill development enhancements

TEACHERS:

- the need for support and ongoing professional training in the use of ICT in the teaching process.

OUR CENTRE:

- raising awareness and providing information on the use of ICT in the teaching process for higher education teachers and staff,
- offering didactic and technical support to higher education teachers and staff,
- offering various training opportunities in the didactic and technical use of ICT,
- collaborating in the development of an integrated study environment and providing maintenance, technical and user support.

THANK YOU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