Action plan for modernisation of teaching and learning in Serbia an Albania

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Introduction

The TeComp project has set a clear goal to enhance the quality of teaching and learning at university level, in partner countries (PC), Serbia and Albania. By means of questionnaires filled out by teaching staff and students, the analysis of current situation in university frameworks in Serbia and Albania is performed and it requires quality improvement.
Forms and models of teaching and learning at the EU HEIs are reviewed and their experiences are collected in the reports of these institutions.
Just as many conclusions those obtained herein should be considered with a caution. This report is based on experiences collected by representatives of the PC HEIs during their visit to UNIOVI, UBB and UO and some differences in practices between EU partners are noticed. Therefore, it would be wrong to conclude that what is presented herein is representative of the HE practices across Europe. Having said that, the obtained information is significant and has some significant correlations between different institutions. This gives us the opportunity to use data, compare the surveys conducted in partner countries (Serbia and Albania), make comparisons and suggest/set project specific outcomes. EU HEIs are defined by great effort and success in using new pedagogical and methodological methods and the high level of integration modern technologies in teaching and learning process.

Project rationale

According to the comparation of the survey conducted in the PC HEIs and situation in EU HEIs we must point out that the deep reform of education in the partner country universities is needed. Obviously, the conclusion is that comprehensive strategies for the adoption of new modes of learning and teaching within higher education have to be developed at both the national and institutional level, and the main proponent of changes should be the teaching staff of these institutions. To be up to the task, the teaching staff must possess the knowledge and skills to allow them to fully utilise the range of

new teaching tools available. Consequently, continual professional development for teaching staff must become the imperative across all higher education institutions.

Preliminary analyses we performed through insight into the study programs of partners from Serbia and Albania have shown that a large number of our university teachers and teaching assistants in the field of natural and mathematical sciences, especially the younger ones, have never attended and completed courses in pedagogy and methodology of teaching. However, the teaching staff at our faculties of natural and mathematical sciences are mostly recruited from those study programs and modules that are oriented towards education of researchers or professionals for work in various companies and government institutions. These study programs and modules sometimes do not provide a choice of courses in pedagogy and methodology of teaching. Consequently, we will organise continual professional development of the teaching staff in pedagogy and methodology of teaching. They should be enabled to attend special courses and to gain new knowledge about the basic pedagogical principles in the higher education, and the specifics of teaching and learning in the field of natural and mathematical sciences, thereby raising the level of their teaching competencies and skills. Through the activities of TeComp project we will organise the training of teachers.

Our project partners from EU have a firm view that regulations need to be changed from top to bottom, as well as that Serbian and Albanian polices must be changed. But if we look around our system, it is very difficult, practically impossible. Because of that, our action plan is to make first changes on the Faculties' level (institutional level), ten to try to implement the project results at our Universities and then, with reference to good results in education to take an initiative for changing the regulations on higher levels and to make them to ensure wide continuous assessment and advancement of the quality of teaching and learning in the PC HEIs. It would be our success if we slowly climb up with implementation modern practice from down level towards the top, during and after the project life. Our imperative must be to apply new modes of learning and teaching and to adopt them, in concrete fields completely.

How can we install the system?

First, we must work on raising awareness about the necessity of modernizing teaching and learning through the integration of new technologies and relevant pedagogy. In order to demonstrate benefits it brings both to teachers and students we will launch several pilot projects for the integration of online technologies and pedagogies within courses, with special emphasis on their integration into laboratory classes. We need to motivate students to work regularly, because group work in labs and hands-on work is the waste of time if they come unprepared.

At our institutions we will also launch an initiative to develop and implement strategies for the support and on-going improvement of the quality of teaching and learning.

Sometimes this is not enough, but it should force students to work, by using some pedagogical methods, which maybe, are not always suitable to them, such as, for example, checking if they follow classes, through short tests on every fifteen-minutes of the lecture. According to the survey results, our EU partners think that we must struggle to keep the students, and our teachers should lower their criteria if it is needed for realising mutual harmony between what they provide and what they require.

Repetition

Our project mast strongly support a high degree initiative to develop "trainers" of trainers and this in view of staff development in Serbian and Albanian universities. The main goal of our future activities is to develop strategies and materials which will introduce the trainers to new approaches that are evidence-based and will be effective and efficient in higher education settings.

The material must be "active" and it must give to trainers a sufficient experiential base to develop their professional background to develop their own training sessions in professional development centres in universities. We will be focused on finding the strategies that teachers can adopt to invoke learning in their students and to pull together all the strategies toward deciding on a systematic curriculum approach that reflects systemic choices for typical objectives and interactive learning activities. To support the hands-on skills and the related reflective abilities in trainers, each strategy will have specific learning objective.

This brings us to the question which goals of the training courses are to be achieved by applying this material?

We aim at developing the following key learning objectives:

- Making decisions how to change nature of an entire curriculum at faculty level.
- Developing a blueprint for materials to be implemented in the context of one course.
- Implementing a curriculum blueprint in one course to exemplify the nature of teacher and student interactive activities.

Advance organizer

This is an introductory activity that gives a basic experience as a base for reflection about a new interactive learning approach in higher education. It is the base for a group discussion that clears the way for a shared understanding of what we will focus upon in the next phase. The advance organizer can be based on a videoclip, a short activity, exploring a website, reading a research note, ... It invites all participants to open their mind for new theme. In many cases, advance organizers can start before the actual training session takes place, since participants can do part of the activity on their own or even have to consult their own setting, learning materials, assessment approaches, etc. We mainly assume all the advance organizers are carried out on-site, where a workshop is set up. This nevertheless still allows that participants can prepare their input beforehand.

Main activity

This will be the core of the hands-on session in the workshop: designing, developing and implementing a specific new interactive learning approach.

Research and literature base

To develop sufficiently grounded competences in the trainers, we will provide background literature, examples from research, case studies, that exemplify how the interactive learning approach indeed can affect learning or related variables in a positive way. As much as possible, a variety of higher education settings is covered to enhance the relevance for participants in a variety of knowledge domains.

Technology dimension

Very often, the interactive learning theme can be linked to specific Information technology solutions. In that case, we will try to give some examples of widespread use of tools, apps or environments, teachers or trainers can install of download to foster the implementation of on-line and blended learning environment setting.

Portfolio Activity

The portfolio setting is the place where participants will get a personal task to be carried out of the training. It will mostly be a product, a design, a prototype, a blueprint of an interactive learning activity that can be set up in the future in a

concrete teaching and learning setting. The portfolio content will be shared among participants and participants will get feedback on their portfolio product during and after the training.

Learning objectives

After studying this theme, you will master the following learning objectives:
Explaining in what way a script represents a competence in a learner.
Writing a script and transversal elements as a base for a video-clip.
Explaining what the socio-motivational part of a competence entails in a video competence training setting.
Create a videoclip that reflects the mastery of a script and related socio motivational elements for competence.
We will explore the interactive potential of video in higher education, but now by stressing its capabilities to support assessment of these competences.

Collaborative learning

One of the most successful interactive learning interventions in higher education is collaborative learning. Firstly, we will develop scripts to guide learners in collaborative tasks.
The key conditions that guarantee that successful collaborative learning will be attained are individual accountability, group accountability, supporting the collaboration process, and giving feedback of the collaboration process and defining roles that will support learners in a collaborative task.

Power of feedback

We will discover how many online assessment tools incorporate possibilities to give feedback.
In study this theme we will try to achieve the following objectives:

- Explaining the rich nature of feedback in terms of feedback, feed up and feed forward.
- Pushing students' work by emphasizing the "learning" orientation when giving feedback.
- Developing tasks that push peer feedback between students.
- Use (self designed) tools to give feedback to peers and students.

APPENDIX

Based on the Joint report on state of art in Serbian and Albanian and EU higher education institutions and above-mentioned action the following action plan is made.

Schedule of the following activities:

No	Activity Title	Start date	End date	Place	Description of the activity carried out
2.2	Preparing material for PPM training courses	March, 2020	December 15th, 2020 January 15th, 2021	Serbia, Albania, UGENT, UGR	This activity is related tothe preparation of printed and electronic materials for psychological, pedagogical and methodological (PPM) training courses. The First activity is going to be visit of teachers from PC universities to UGENT university. The teachers of pedagogy and teaching methodology, have started working on preparation of educational materials using various online platforms and tools. First working drafts of educational materials will be designed soon Next visit to UGR will be realized during the April 2020. Teachers from specialised departments at UGENT and UGR, will share their knowledge and skills and helping in preparation the program and learning materials for upcoming training courses.
2.3	Creating material for providing language support for teaching staff		January 30th, 2021	Serbia, Albania	Printed and electronic material for providing language support to professional development of teaching staff are being prepared during this activity. The project staff is using the material that has already been developed by the project FUSE (TEMPUS project, coordinator UNI) and EMI methods of learning, as a baseline for this activity, and it is being used and adapted to the specific needs of teaching and academic writing in English in the field of natural and mathematical sciences. The teachers are using various online tools to draft, adapt and refine the working materials.
2.4	Preparing guidelines for the technological enhancement of T&L;	March, 2020	May 2020	Program countries: UNIOVI, UMB, Serbia, Albania	Guidelines and instructions for wider integration of ICT in teaching and learning are being prepared. Teachers who will implement training courses for using new educational technologies later in the project have started working on the programs and teaching materials online with the help of partners from UMB and UNIOVI. The experts will present their experiences in using

					modern technologies in T&L by using online tools and methods. Teachers will visit UNIOVI in the first week of June 2020, and UMB during the May 2020.
3.1	Organising the Workshop on innovative PPM approaches		September, 2020	Program countries, Serbia, Albania	The Workshop will be postponed for September 2020 and will be organised in Niš. The objectives of the activity are: •to disseminate the latest achievements concerning teaching methodology in higher education, modern pedagogical approaches and technology enhanced teaching and learning •to raise the general awareness of stakeholders from the partner countries about the necessity of changing ways of teaching and learning in higher education, and importance of using the contemporary methodologies, psychological and pedagogical approaches and educational technologies in teaching and learning Contributions of the participants will be recorded during the workshop.
3.2	PM training of teaching staff		June to December 2020 (first and second series)	Serbia, Albania, UGENT, UGR	The first series will be organised at the PC HEIs and the trainers will be teachers of PPM from these HEIs. In the second series of training courses instructors will be teachers from UGENT and UGR. The courses will be held in two parts: for Serbian trainees and for Albanian trainees) and the lectures will be monitored via online tools and applications and via the video conference (5 days).
3.3	Training of teaching staff for using new educational technologies		June to December 2020 (first and second series)	Serbia, Albania, UNIOVI, UMB, UO	The first series will be organised at the PC HEIs and the trainers will be teachers of computer science from these HEIs. In the second series of training courses instructors will be teachers from UNIOVI, UMB and UO. The courses will be held in two parts: for Serbian trainees and for Albanian trainees) and the lectures will be monitored via online tools and applications and via the video conference (5 days).
3.4	Training for teaching and academic writing in English	April 2019	June 30th, 2021	Serbia, Albania	Based on the teaching and learning material prepared within the activity 2.4 training courses will be organised, with trainers who are lecturers of English at the corresponding PC HEIs.
3.5	Development of structure and	May, 2020	October 2020,	Serbia, Albania	Within this activity, structure and content of the new/modified courses at the PC universities will be

	contents of courses for students and young teachers				introduced with the aim of strengthening competences of young university teaching staff in pedagogy, psychology, methodology and technology enhanced education, based on new knowledge and skills acquired through the training courses instructed by EU experts. Some methodical subjects will be modernized at each PC University in the field of natural and mathematical sciences.
3.6	Approved/Accredited new master courses and continuing professional development courses	June 2020	October 2020, May 2021	Serbia, Albania	This activity has been started and during the activity the team is doing on preparation documentation for the approval or accreditation event (somewhere the activity will start earlier than it was originally planned).
4.1	The integration of online technologies into traditional courses	February 2020	During the whole project life	Serbia, Albania	Within this activity pilot projects will be launched, for the integration of online technologies into a certain number of traditional courses at the PC HEIs in all areas of natural and mathematical sciences. The role of these pilot projects is to demonstrate the benefits of using online technologies in teaching and learning, and to encourage a wider circle of teachers and teaching assistants to use these technologies themselves. The use of online learning platforms should allow students easier and faster access to the learning material and relevant information, access at any time, as well as better understanding and more efficient learning. That will also contribute to the realization of the active role of students in the learning process, individualization of learning and better communication between students and teachers, which will lead to the transition from teacher-oriented to student-oriented approach to learning.
4.2	Developing system for electronic testing	June. 2020	Ongoing activity	Serbia, Albania	A team of experts in information technology and pedagogy from the partner institutions (not necessarily the same as in Activity 4.1), in cooperation with teachers of particular subjects, will propose methodological and software solutions for the development of systems for electronic testing and monitor the creation of these systems.
4.3	Forming online labs	November 2020	Ongoing activity	Serbia, Albania	Within this activity pilot projects for the integration of online technologies into a certain number of laboratories

					at the PC HEIs will be launched. A team composed of experts in information technology from the partner institutions and teachers who plan to integrate online technologies into their laboratory exercises will examine specific needs and opportunities of these laboratories, propose methodological, hardware and software solutions for such integration and monitor the realisation of the pilot projects. In the realization of this activity equipment purchased from the project budget will be used.
4.4	Preliminary analysis of performance indicators	January 2021	Ongoing activity	Serbia, Albania	This activity is focused on defining the methodology that will be used in the analysis of performance indicators of new teaching and learning methods introduced within activities 4.1-4.3, and then, a preliminary analysis of performance indicators will be conducted and the results of the analysis will be published in the form of a report.

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