



**Strengthening Teaching Competences
in Higher Education
in Natural and Mathematical Sciences**

Co-funded by the
Erasmus+ Programme
of the European Union



Report on the supervision of syllabus and structure of courses

October 2022



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Project acronym:	TeComp
Project full title:	Strengthening Teaching Competences in Higher Education in Natural and Mathematical Sciences
Project No:	598434-EPP-1-2018-1-RS-EPPKA2-CBHE-JP
Number of grant contracts	2018-2467/001-001
Web address of project	www.tecomp.ni.ac.rs
Funding Scheme:	Erasmus+
Coordinator Institution:	University of Niš
Coordinator:	Prof. dr. Jelena Ignjatović
Project duration:	15.11.2018. – 14.11.2021.
Work package:	WP3 – Review process of the curriculum development
Lead organization of WP1:	P1- University of Niš- UNI
Task 3.6	Delivering new/updated accredited/adopted courses
Version of the document:	v.02
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Dissemination level:	Internal

Author of the report:

Jelena Ignjatović



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 (at the beginning of the project Serbia was partner country, although things are changed during the project life and it is program country, as well). Based on experiences collected through the project activities and numerous trainings we recognized the state in higher education required great quality improvement and we put a lot of effort into raising awareness among teachers about the necessity of using new pedagogical and methodological methods as well as modern technologies in teaching and learning process.

Our project partners from EU had a firm view that regulations need to be changed from top to bottom, respecting that Serbian and Albanian policies must be changed. But, during the last period, including the Covid-19 pandemic and current situation between Russia and Ukraine, it was practically impossible. Because of that, we started with the changes at the Faculty level (institutional level), then implemented some new strategies for the sustainability of the project results at our Universities and later, with reference to good results in higher education we have a plan 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 at the PC HEIs. We succeeded to develop curriculum at almost all partner country universities, modernized many subjects, implemented new ways of teaching and learning and started to climb up slowly with implementation of modern practice from bottom level towards the top, during project life. Our imperative was to apply new models of learning and teaching and to adopt them, in concrete fields completely. The main proponent of changes is teaching staff of the partner institutions. The acquired knowledge and skills allowed them to fully utilize the range of new teaching tools available. In order to demonstrate benefits that modern methods of teaching and learning bring both to teachers and students, during the project life, many pilot projects were launched for the integration of online technologies and pedagogies within courses. Consequently, continual professional development for teaching staff must become a significant part of higher education.

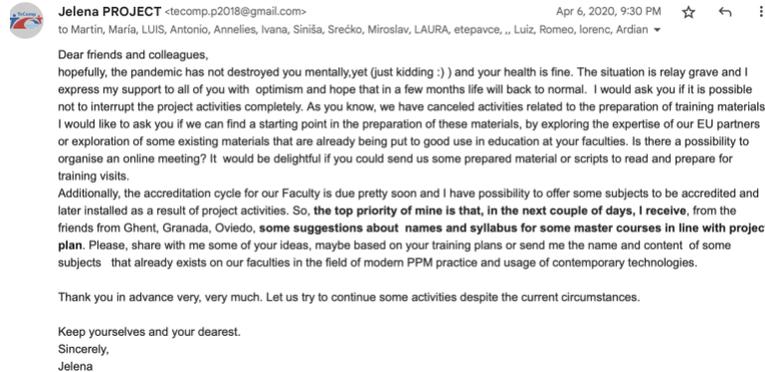
Reviewing process

Analysis of the situation in higher education in Serbia and Albania, as well as the comparative analysis with the partner EU country universities showed a huge necessity for innovation in terms of both IT technologies used and application of new psychology and methodology principles in teaching and learning in the field of natural sciences and mathematics. While we were still in a very early phase of subject innovation, CoVid-19 pandemic started and pushed us to not only work a lot faster, but also adapt even more to the new methods of organization of online teaching and learning. Nonetheless, it was crucial to raise the awareness of teachers on the importance of enhancing their proficiency with modern methods of education. When the stakes were at the all-time high, we requested help from our EU partners:

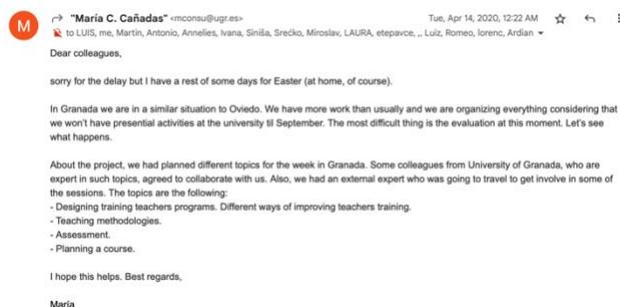
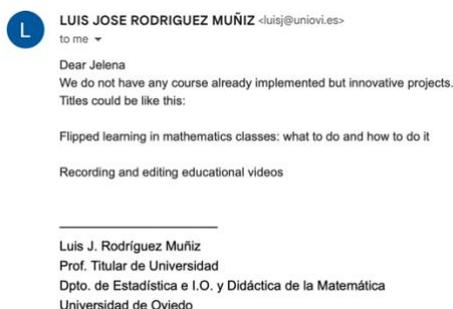
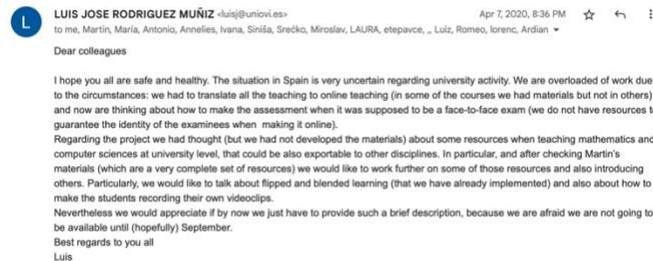


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As can be seen in this mail, the process of innovation in cooperation in collaboration with our EU partners began in April 2020 and lasted almost the entire project life. Regular collaboration, alongside their courses and training sessions, allowed us to innovate upon most subjects, to accredit many new subjects connected to new technologies and methodologies in teaching, as well as to change the methods of work in subjects that did not get a change in course content.



On some universities in Serbia, the accreditation period came at a clutch, so we managed to get many new subjects accredited. All of those subjects were made in close collaboration with our EU partners, who have given us a lot of useful advice. They paid close attention to every step we took, mostly keeping an eye on carefully selected outcomes and learning objectives of the subjects, active training material, detailed plan of assessment approaches, feedback, flipped learning, educational videos, rubrics, etc. Even professors who were not originally members of the project team innovated on their subjects through regular communication with the colleagues from their universities, from which they realized the positive influence that modern methods bring to teaching and learning.



Through numerous trainings, we learnt a lot about the application of new software solutions for the organization of different types of teaching. Many teachers have immediately implemented those newly learnt methods in their subjects. Those subjects were then uploaded to a new platform tailor-made to suit the requirements of TeComp project. The platform took inspiration from a marvelous Ufora platform, developed for the university of Ghent, that we got familiar with during their 3-month training. LearningKey has been shown off to the public in great detail during the training in Granada, workshop in Nis and the last training in Oviedo to an outstanding result.

Reviewers' Comments (extracted):

- Each subject should have clear aims and outcomes attached to it so that students/learners know what the intention of the subject is, as well as knowledge/skills that they should gain by the end of the subject;
- Use presentations to their full power;
- Do not overload slides with text (MSc and PhD students need some bullet points per page rather than full text);
- Make good use of images, videos, posters and tables to explain units;
- Make sure that the presentations are interactive (MSc and PhD students should have basic knowledge so make sure that you lead them to think about advanced topics that you are presenting to them and engage them as much as it is needed/possible – adopt learning by doing and problem-based approach);
- Provide information about available further reading/resources;
- Provide clear/comprehensive/detailed guidance to what students need to do;
- Almost all software solutions that are practiced during the trainings are implemented in great number of courses.

Conclusion:

The process of implementation of new/innovated courses in all study levels has been lasting almost whole year and it was supervised, more or less regularly by EU partners. They gave valuable and detailed recommendations and comments to teachers from Serbia and Albania. Based on that, partner country teachers optimized their courses to the highest possible extent in accordance with their suggestions.



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DECLARATION

In the framework of the project: **“Strengthening Teaching Competences in Higher Education in Natural and Mathematical Sciences – TeComp”**, I was involved in the process of delivering new/innovated courses organized by teachers from Serbia and Albania who implemented knowledge and skills acquired through project activities in their teaching and learning .

A handwritten signature in blue ink, appearing to read "V. Janis".

Signature

Vladimir Janis, UMB

Name and surname, member of CMT



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Signature

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- 11429631B

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por RODRIGUEZ MUÑIZ
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Usuarios

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β/15/2021

prof. dr. Martin Valcke, Ghent University

Signature

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Martin Valcke
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