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# TECOMP QUALITY REPORT

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Introduction: The Quality Report aimed to assure the quality of the project. It implied to deploy a wide range of actions that helped to guarantee that the project had impact on target groups, demonstrating the quality of the project outcomes, management efficiency and that the project had been developed according to the guidelines established in the drawing documents.

Let us talk about our project. The main objective of the project is improvement of the quality of higher education in the field of natural and mathematical sciences at higher education institutions in Serbia and Albania in line with advanced EU practices. This wider aim will be achieved through completion of the set of specific objectives concerned with the areas where the measures should be applied:

- to enhance professional competences and skills of teaching staff
- to upgrade educational infrastructure
- to deliver new/modified courses in psychology, pedagogy, methodology of teaching, and technology

- to strengthen personnel infrastructure through the introduction of continuous professional development in the system of higher education.

The project will particularly focus on the transition from a teaching-oriented to learning-oriented approach to the learning process, a flexible approach and individualization, as well as better communication and interaction between teachers and students. The target areas at Serbian and Albanian universities that need quality enhancement of teaching and learning processes will be identified and a concrete action plan with necessary measures and actions will be made.

The project partners are:

- 1- University of Nis
- 2- University of Belgrade
- 3- University of Novi Sad
- 4- University of Kragujevac
- 5- Eqrem Cabej University
- 6- Fan S. Noli University
- 7- University of Oviedo
- 8- Matey Bel University
- 9- Ghent University
- 10- University of Granada
- 11- University of Ostrava

For this purpose, in the first year of the project, except quantitative analysis of teaching competences of young, newly hired university teachers and detailed analysis of the use of modern educational technologies in T&L in our universities, several meetings were successfully organized and implemented.

We are mentioning them:

1-Nis Kick-off Meeting, (CMT Meeting)

2-Oviedo Meeting

3-Ostrava Meeting

4-Banska Bystrica Meeting

5-Belgrade Meeting, (LCT Meeting)

Then I am presenting these meetings, giving some brief commentary on them. I welcome all your comments and proposals which, together with the statistical data obtained from the questionnaires with the participants, will constitute the annual quality report.



## KICK-OFF MEETING AGENDA

Main Building, Univerzitetski trg 2, Niš

January 15<sup>th</sup> -17<sup>th</sup>, 2019

### Tuesday, January 15<sup>th</sup>, 2019

09.30-10.30	<b>Registration</b>
10.30-11.00	<b>Opening Ceremony (GREAT HALL)</b> <b>Zoran Nikolić</b> , Advisor to the Rector, University of Niš <b>Jelena Ignjatović</b> , General project manager
11.00-11.45	<b>Jelena Ignjatović</b> , General project manager, University of Niš <i>TeComp overview: Work packages, activities, project management and action plan</i>
11.45-12.15	<b>Coffee break</b>
12.15-12.45	<b>Miroslav Ćirić</b> , Financial manager, University of Niš <i>Financial management</i>
12.45-13.15	<b>Saša Nikolić</b> , Financial manager, University of Niš <i>Financial reporting</i>
13.15-14.30	<b>Lunch break</b>
14.30-15.00	<b>Aleksandra Zarubica</b> , Professor, University of Niš <i>University of Niš, Faculty of Sciences and Mathematics: Organisation, programs and activities</i>
15:00-15.30	<b>Jelena Petrović</b> , Assistant Professor, University of Niš (TBA)
15:30-16.00	<b>Ivana Micić</b> , Assistant Professor, University of Niš <b>Zorana Jančić</b> , Assistant Professor, University of Niš <i>New technologies in teaching and learning</i>
16.00-16.30	<b>Ivan Jocić</b> , IT Specialist, University of Niš <i>Presentation of the project web site and project management application</i>
19.30	<b>Dinner</b>

Wednesday, January 16th, 2019	
09.00-9.30	<b>Siniša Đurašević</b> , Project manager, University of Belgrade <i>University of Belgrade (TBA)</i>
9.30-10.00	<b>Andreja Tepavčević</b> , Project manager, University of Novi Sad <i>University of Novi Sad (TBA)</i>
10.00-10.30	<b>Srećko Trifunović</b> , Project manager, University of Kragujevac <i>University of Kragujevac (TBA)</i>
10.30-11.00	University of Gjirokastra <i>University of Gjirokastra (TBA)</i>
11.00-11.30	Coffee break
11.30-12.00	University of Korce <i>University of Korce (TBA)</i>
12.00-12.30	<b>Luis J. Rodríguez-Muñiz</b> , Project manager, University of Oviedo <b>Laura Muñiz-Rodríguez</b> , University of Oviedo <i>Initial and continuous teacher training in the University of Oviedo</i>
12.30-13.00	<b>Vladimir Janis</b> , Project manager, University of Banska Bystrica <i>University of Banska Bystrica (TBA)</i>
13.00-13.30	<b>Martin Valcke</b> , Project manager, Ghent University <i>Ghent University (TBA)</i>
13.30-15.00	Lunch break
15.00-15.30	<b>Antonio Moreno Verdejo</b> , Contact person, University of Granada <i>University of Granada (TBA)</i>
15:30-16.00	<b>Irina Perfiljeva</b> , Project manager, University of Ostrava <i>University of Ostrava (TBA)</i>
16:30-17.00	Coffee break
17.00-18.00	CMT Meeting
19.30	Dinner
Thursday, January 17 <sup>th</sup> , 2019	
09.30-10.30	Round table (Discussion on activities and conclusions)



The kick-off meeting took place 15-17 January. The work plan followed the Agenda and all the partners participated in the meeting. There was a lot of interest and support from the participants. After the welcoming speech and the presentation of the project by the general manager and financial manager, all partners were presented. Then, it was developed the first CMT meeting. The meeting was constructive and details of the project tasks were set out. I want to emphasize the hospitality of the organizers and the ongoing understanding between the partners.



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



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## Workshop on innovative teaching methodologies for mathematics and sciences in the University of Oviedo

Location (unless contrary indicated): Sala de Grados, 3<sup>rd</sup> floor, Facultad de Formación del Profesorado y Educación (<https://goo.gl/maps/saLva2vne4L2>)

### Monday 25<sup>th</sup> March

17:00	Welcome and presentation of the workshop
18:00	Promenade through Oviedo

### Tuesday 26<sup>th</sup> March

9:30	Food control, Citizen Science and Gaming as educational tools alternatives to improve transversal competences when teaching Biology (Dr. Yaisel Borrell)
10:45	Coffee break (Cafeteria, Faculty of Geology ( <a href="https://goo.gl/maps/Ur8Ybex2LwN2">https://goo.gl/maps/Ur8Ybex2LwN2</a> ))
11:15	Active teaching and learning of Mathematics in higher education (Dr. José Ángel Huidobro and Dr. María Luisa Serrano)
12:30	Experiences with flipped learning and video vignettes for future mathematics teachers (Dr. Luis J. Rodríguez-Muñiz and Dr. Laura Muñiz-Rodríguez)
16:00	Programming quiz as an additional tool for learning Python (Dr. José Ramón Villar and Noelia Rico)

### Wednesday 27<sup>th</sup> March

9:00	Institutional reception by the Rector (Rectorate ( <a href="https://goo.gl/maps/nSt2pgMcYAm">https://goo.gl/maps/nSt2pgMcYAm</a> ))
10:30	Coffee break (Cafeteria, Faculty of Geology ( <a href="https://goo.gl/maps/Ur8Ybex2LwN2">https://goo.gl/maps/Ur8Ybex2LwN2</a> ))
11:00	The Innovation Center of the University of Oviedo (Dr. Aquilina Fueyo)
12:00	The INIE: Institute for Educational Research and Innovation (Dr. Emilio Álvarez Arregui)
16:30	A whole group discussion of a geometric task: Instructional Quality Assessment (IQA) (Dr. Itziar García-Honrado)

### Thursday 28<sup>th</sup> March

9:45	Teaching and learning resources employed in the chemistry degree to enhance student learning and to promote multidisciplinary skills (Dr. José Manuel Costa and Dr. José Manuel Fernández-Colinas)
10:45	Coffee break (Cafeteria, Faculty of Geology ( <a href="https://goo.gl/maps/Ur8Ybex2LwN2">https://goo.gl/maps/Ur8Ybex2LwN2</a> ))
11:15	Teaching Classical Mechanics with Smartphones: acceleration and trajectory (Dr. María Vélez)
12:30	Moodle workshop for Informatic Tools (Dr. César Alonso and Dr. Irene Díaz)
16:00	Meeting of partners from Serbia and Albania

### Friday 29<sup>th</sup> March

9:00	Summary and conclusions of the workshop
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The Oviedo meeting took place 25-29 March. The work plan followed the Agenda and all the partners participated in the meeting. The title of the meeting was “Workshop on innovative teaching methodologies for mathematics and sciences in the University of Oviedo”. There was a lot of interest in topics about active teaching and learning of mathematics, experiences with flipped learning and video vignettes, teaching classical mechanics with smart phones, use of informatics tools, the use of fuzzy modeling to estimate the results of the teaching. It was very interesting the work about the teaching and learning resources employed in the chemistry degree to enhance student learning and to promote multidisciplinary skills. I want to emphasize the hospitality of the rector and organizers.





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## Workshop on Modern Teaching Inspired by Science

Ostrava, Czech Republic

May 13-17, 2019

**Monday, May 13, 2019**

**Faculty of Science, 30. dubna 22, Room C610**

17:00 – 18:00      Arrival and Registration

**Tuesday, May 14, 2019**

**Faculty of Science, 30. dubna 22, Room C610**

9:00 – 9:15	Welcome and Opening remarks
9:15 – 9:45	Jiří Močkoř: History and traditions of the University of Ostrava
9:45 – 10:30	Jaroslav Žáček: IRAFM laboratory: Fuzzy modeling in practice
10:30 – 11:00	Coffee break
11:00 – 12:30	Tomáš Drobík: Innovative teaching methodologies in the Faculty of Science

**Wednesday, May 15, 2019**

**Faculty of Science, 30. dubna 22, Room C610**

9:00 – 9:30	Zemanová: Genetic Constructivism in Mathematics - Hejny's Method
9:30 – 11:30	Visit to the Faculty of Art: Workshop on software and other techniques in modern painting, (Podlahovova 3, Ostrava – Mariánské Hory)
14:00 – 15:00	CMT Meeting

**Thursday, May 16, 2019      Faculty of Social Studies, Českoobrátská 16, Room B303**

9:00 – 9:30	Martin Dyba: Fuzzy modeling – Signature IRAFM Software products used in teaching and research
9:30 – 10:00	Daniela Einšpígllová: Diploma Thesis on „How to fill up a water reservoir using fuzzy modelling methods“
10:00 – 10:30	Karel Šnajdr: Diploma Thesis on „Using soft computing method for vehicle overtaking“
10:30 – 11:00	Coffee break
11:00 – 11:30	Libor Běhounek: Teaching "Formal set theory" with regard to students' comprehension
11:30 – 12:00	Petr Hurtík: Teaching „Modern computer vision“ for mathematicians, informaticians, biologists and artists
12:00 – 12:30	Michal Burda: A PhD project of mobile application for biological species recognition
12:30 – 14:00	Lunch break
14:00 – 14:30	Round table (Free Discussion on a current state of the project)

**Friday, May 17, 2019**

**Faculty of Science, 30. dubna 22, Room C610**

9:00 – 10:00	Round table (Discussion on further activities and conclusions)
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The Ostrava meeting took place 13-17 May. The work plan followed the Agenda and all the partners participated in the meeting. The title of the meeting was “Workshop on modern teaching inspired by science”. There were very interesting innovative teaching methodologies, Hejny’s method, fuzzy modeling in practice and some new software. I want to emphasize the hospitality of the organizers.



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## **Agenda of project meeting at Matej Bel University**

**May 17 – 20, 2019**

Banska Bystrica, Slovak Republic

### **Friday May 17**

19:00 - welcome dinner

### **Saturday May 18**

10:00 – 11:00 Vladimir Janis: Educational aspects of mathematics at university level

11:00 – 12:00 Ingrid Turis: Evaluation of teaching at Matej Bel University

12:00 – 12:30 Coffee brake

12:30 – 13:30 Romana Schubertova: New aspects of teaching in biology

14:00 – sightseeing of Banska Bystrica

### **Sunday May 19**

10:00 - 13:00 – meeting of partners from Serbia and Albania  
(analyzing the current situation at PC universities)

13:00 – 14:00 visit to the Museum of Nature History, Banska Bystrica

15:00 - 18:00 - excursion to educational and research area Jakub

### **Monday May 20**

10:00 - 11:00 – visiting educational laboratories at Matej Bel University

11:10 - 11:30 - library at Matej Bel University

11:40 - 12:00 - methods of teaching evaluations

12:00 – 13:00 – lunch

13:00 – 13:30 Vladimir Janis: Presentation of the results of previous projects on teacher training

13:30 –14:30 Martina Skodova: Preparing students for teaching at university level

19:00 – dinner



The Ostrava meeting took place 17-20 May. The work plan followed the Agenda and all the partners participated in the meeting. I can stress educational aspects of mathematics at university level, evaluation of teaching and I want to emphasize the hospitality of the organizers and very friendly relations between participants.





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## LOCAL COORDINATING TEAM MEETING AGENDA

University of Belgrade – Faculty of Biology, Studentski trg 16, Belgrade  
July 11<sup>th</sup> -13<sup>th</sup>, 2019

### Thursday, July 11<sup>th</sup>, 2019

11.00-11.45	<i>Reviewing a report on the level of PPM knowledge/skills of university newly hired teachers at the PC HIEs</i>
11.45-12.15	<b>Break</b>
12.15-13.00	<i>Reviewing a report on the current state of technology enhanced teaching and learning at the PC HIEs</i>
13.00-15.00	<b>Lunch break</b>
15.00-15.45	<i>Reviewing a report on the practice in T&amp;L at the EU HEIs</i>
15:45-16.00	<b>Break</b>
16:00-16.45	<i>Preparation of a joint report</i>
16.45-17.00	<b>Break</b>
17.00-18.00	<i>Preparation of an action plan for modernisation of T&amp;L at the PC HEIs</i>

Friday, July 12 <sup>th</sup> , 2019	
10.00-10.45	<i>Review of quality assurance and monitoring activities</i>
10.45-11.15	<b>Break</b>
11.15-12.45	<i>Reviewing internal work quality standards and procedures</i>
12.45-15.00	<b>Lunch break</b>
15.00-15.45	<i>Overview of activities within Work Package 6</i>
15:45-16.00	<b>Break</b>
16:00-16.45	<i>Overview of activities within Work Package 7</i>
16.45-17.00	<b>Break</b>
17.00-18.00	<i>Use of the Project Administration Platform (PAP)</i>

Saturday, July 13 <sup>th</sup> , 2019	
10.00-11.00	<i>Review of activities for the launch of the Work Package 2</i>
11.00-11.30	<b>Break</b>
11.30-12.30	<i>Review of activities on purchase of equipment</i>
12.30-15.00	<b>Lunch break</b>
15.00-16.30	<i>Meeting of representatives of Serbian universities – discussion on the purchase of equipment</i>

The LCT Beograd meeting took place 11-13 July. The work plan followed the Agenda and all the partners participated in the meeting. This was the first MCT meeting. In this meeting was discussed about reviewing some reports about teaching and learning in our universities and preparation of a joint report. Then it was discussed about the quality assurance and monitoring activities and an overview of activities within Work Package 6 and 7. I want to emphasize the hospitality of the organizers and very friendly relations between participants.