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Erasmus+ Programme
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Predstavljanje trenutno aktivnih Erasmus projekata UCG-a

Enhancing and Validating service related competences in Versatile learning environments in Western Balkan Universities (e-VIVA)

Rukovodilac projekta: Sanja Peković, Jelena Šaković Jovanović
Organizaciona jedinica koja vodi projekat: Mašinski fakultet

ReBUS

Internet stranica projekta: <https://evivaproject.eu/>

Podgorica,
24.11.2021.

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Enhancing and Validating service related competences in Versatile learning environments in Western Balkan Universities (e-VIVA)

Vrijeme trajanja projekta: 15. 11. 2018 – 15.11. 2021. godine

Produženje projekta na 9 mjeseci – do 14. 08. 2022. godine

Budžet projekta: 993,581.40 EUR

Budžet UCG: 67, 745.00 EUR



Partneri na projektu



- **16 Partners**
 - **EU (4):** die Berater Unternehmensberatung GmbH (Austria), Blended learning institutions' cooperative / blinc eG (Germany), University of Duisburg Essen/UDE (Germany), Universidade Nova de Lisboa (Portugal);
 - **ME (2):** University of Montenegro, University of Donja Gorica;
 - **AL(2):** European University of Tirana, University of Elbasan "Aleksander Xhuvani" / UEAXH;
 - **FYROM (2):** Ss. Cyril and Methodius University, Mother Teresa University;
 - **BIH (2):** University of Sarajevo, Sarajevo School of Science and Technology (SSST);
 - **KOS (2):** Universum College, University Kadri Zeka Gjilan;
 - **SRB (2):** University of Nis, University of Novi Sad.
- **Coordinator:** European University of Tirana.

Cilj projekta

Ključni cilj projekta je da se studentima **Zapadnog Balkana** omogući **sticanje servisno orijentisanih kompetencija** kroz F2F učenje, web orijentisano učenje i učenje kroz praksu u izabranim preduzećima. Projektom se želi i podstaći saradnja univerziteta i privrede.

Servisno orijentisane kompetencije, prepoznate kao vrlo tražene od strane poslodavaca se odnose na **komunikativnost, kreativnost, timski rad, preduzetništvo, kritičko razmišljanje...**

Projektom je predviđeno **inkorporiranje modula učenja** o servisno orijentisanim kompetencijama u **nastavne planove i programe na Univerzitetu Crne Gore**.

e-VIVA work packages and Lead partners from Programme Countries

- WP 1 Preparation: Research and needs analysis
 - Lead partner – University Duisburg-Essen
- WP 2 Development: Service related competences learning approach (incl. validation)
 - Lead partner: Blinc eG, Germany
- WP 3 Development: Training and counselling of HE staff
 - Lead partner: University NOVA Lisbon
- WP 4 Development: Piloting the Competences-based learning approach (incl. Validation) of competence developments, accreditation and certification
 - Lead partner: dieBerater
- WP 5 Quality Plan and Evaluation
 - Lead partner: dieBerater
- WP 6 Dissemination and exploitation of project results
 - Lead partner: UET - European University of Tirana
- WP 7 Management
 - Lead partner: UET - European University of Tirana



WP1: Preparation: Research and needs analysis



With the support of the
Erasmus+ Programme
of the European Union



TOGETHER

Desk research – UOM and UDG

Survey 80 responds - UOM and UDG

Interview – separately UOM and UDG

**NATIONAL REPORT
-MONTENEGRO-**

CONTENT:

- 1. SUMMARY (in English and Montenegrin)**
- 2. DESCRIPTION**
 - 2.1 DESK RESEARCH
 - 2.2 SURVEY
 - 2.3 INTERVIEW
- 3. INTERPRETATION**



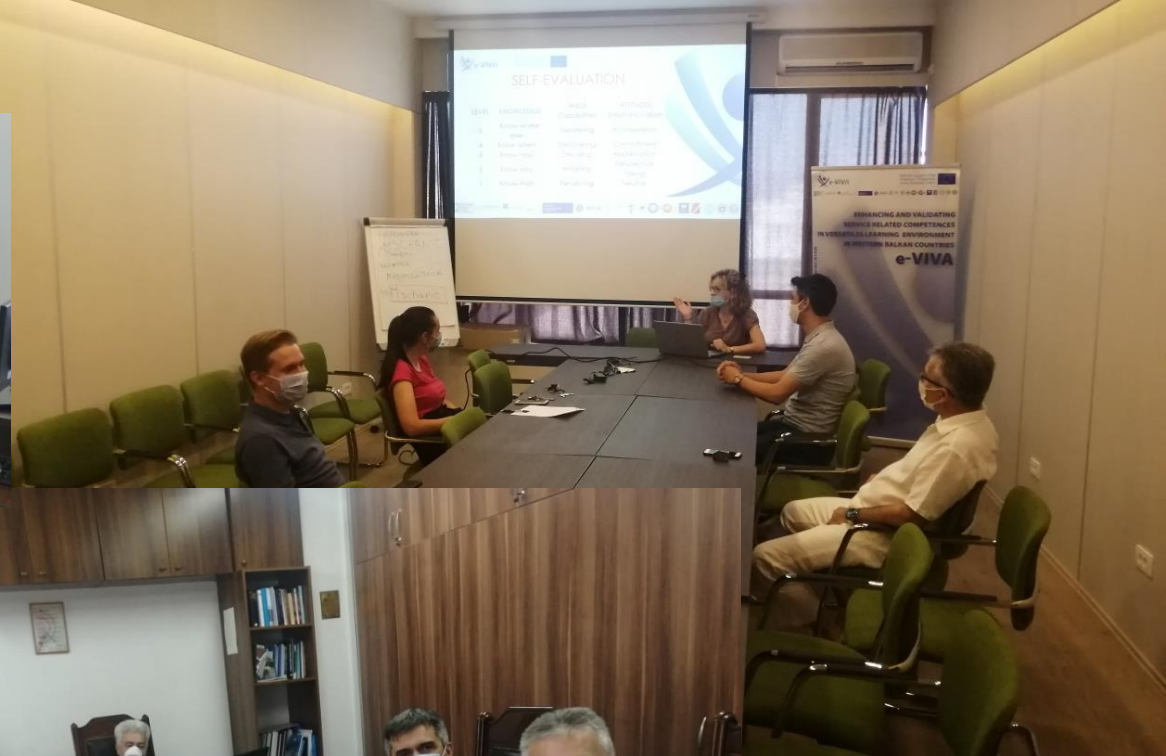
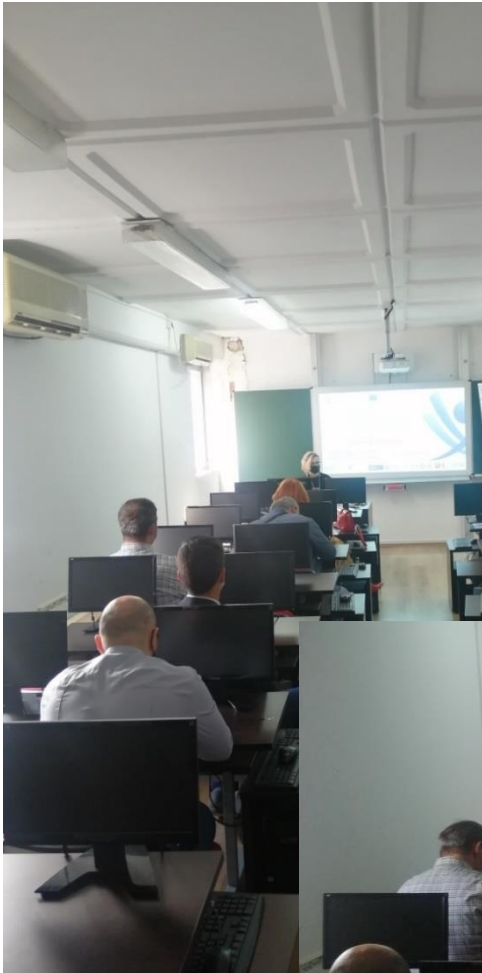
WP 2 and WP3 Development

- **Obučeno osoblje UCG od strane EU partnera** u dijelu razvoja servisno orjentisanih kompetencija studenata
 - **Lisbon** Training and Management Meeting
 - **Vienna** Training and Management Meeting
 - **Essen** Training and Management Meeting
 - two trainings with academic staff at the UOM
 - one workshop with business community
- **Izabrani kursevi kroz koje će se realizovati obuke studenata**
- **Definisani planovi obuke studenata**





Workshop with business community



Trainings with academic staff

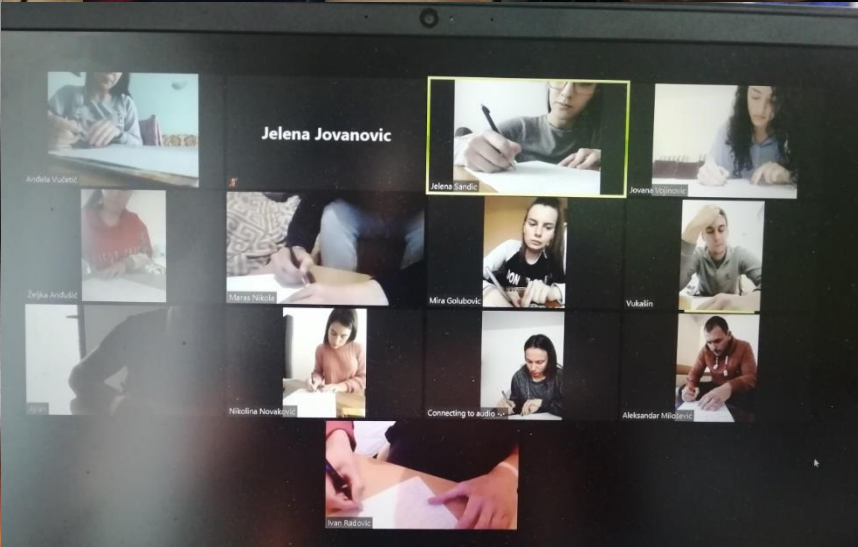
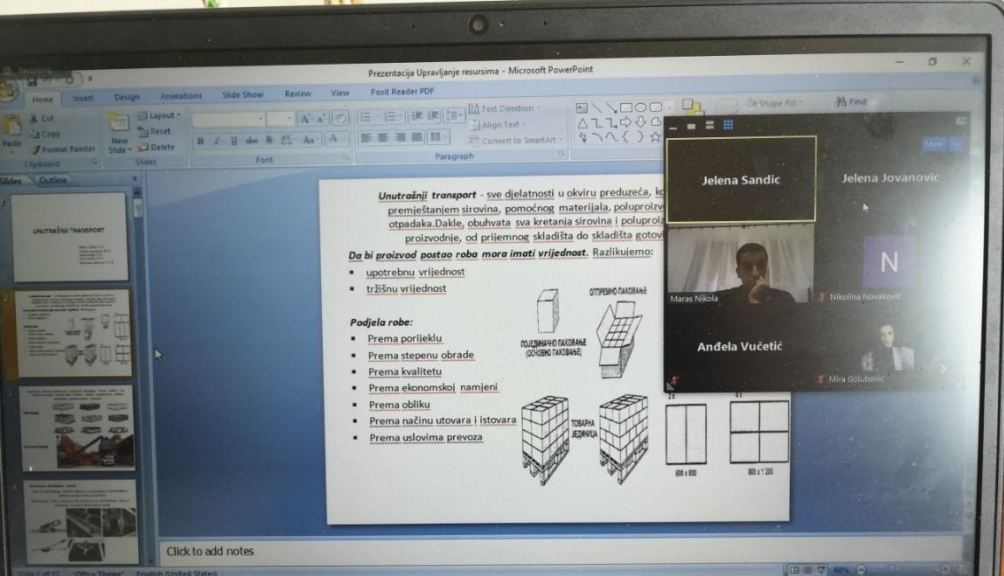
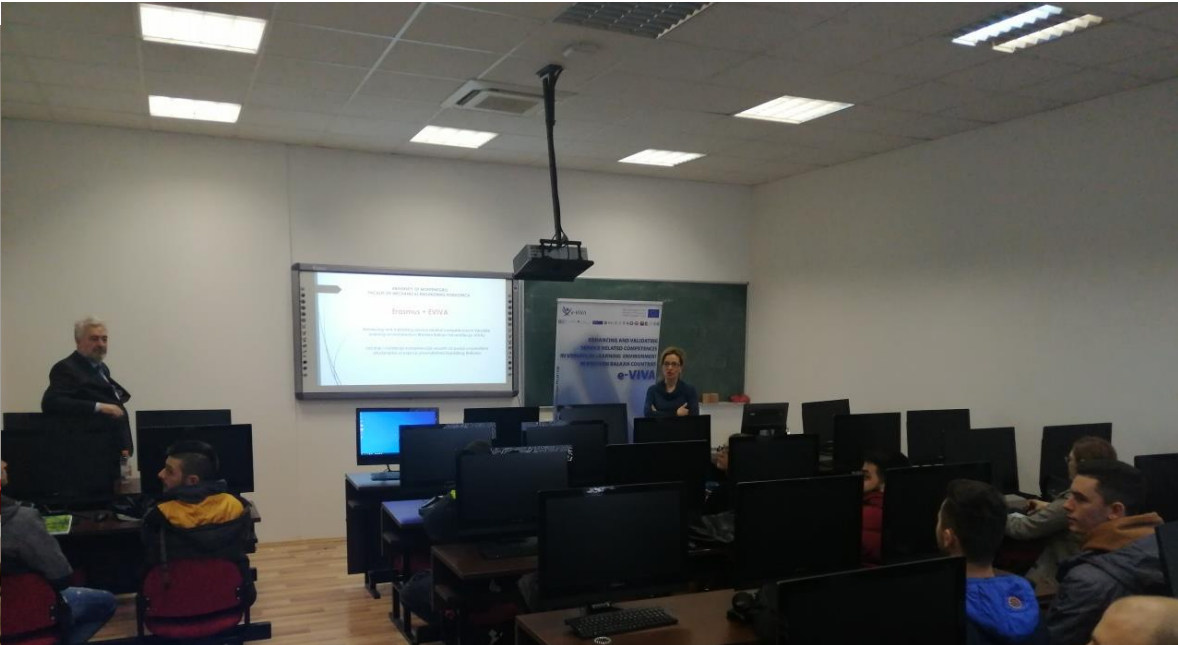
TRAININGS FOR STUDENTS

I GENERATION: Spotting ideas and opportunities, Teamwork,

II GENERATION: Communication, Teamwork



Trainings for students – I generation



Trainings for students – II generation



OPREMA

Hardware: Računarska oprema (3D printer) - 17 000 EUR

Software za potrebe obuke studenata (10 000 EUR):

Mahara – studenti kreiraju svoje profile i medjusobno se povezuju

Moodle – za obuku i nastavni materijal

Level 5 – evaluacija studenata







- <https://www.ucg.ac.me/objava/blog/1291/objava/68239-masinski-fakultet-u-borbi-protiv-covid-19>
- <https://www.cdm.me/drustvo/masinski-fakultet-izradom-vizira-protiv-virusa-covid-19/>
- <https://fosmedia.me/tehnologija/digital/pomoc-zdravstvenim-radnicima-masinski-fakultet-izradom-vizira-protiv-korona>



MAHARA



e-VIVA Search users [X] [1] [v] [f] [≡]

I graduated at the Faculty of Mechanical Engineering in Podgorica in 2000. I...
Joined: 25 November 2019

Aleksandar Bubanja (abubanja) - Member [Change role] [X] Remove from group
Joined: 6 June 2020

Aleksandar Vujovic (avujovic) - Member [Change role] [X] Remove from group
Joined: 1 February 2020

Asmir Nikezic (anikezic) - Member [Change role] [X] Remove from group
Joined: 11 March 2021

Balsa Vukovic (bvukovic) - Member [Change role] [X] Remove from group
Joined: 2 April 2021

Bozidar Cirkovic (bcirkovic) - Member [Change role] [X] Remove from group
Joined: 28 February 2020

Dejan Delic (ddelic) - Member [Change role] [X] Remove from group
Joined: 5 November 2020

e-VIVA Search users [X] [1] [v] [f] [≡]

Vladislav Baković
Member of University of Montenegro
Montenegro [v] [Send invite]

File(s) to download

Canvas VB.docx - Monday, 01 February 2021 [441.8KB]	Vladi
EvivaEN.pptx - Monday, 01 February 2021 [3.8MB]	Vladi
EvivaCG.pptx - Monday, 01 February 2021 [3.9MB]	Maximur

About me

First name: Vladislav
Last name: Baković

e-VIVA Search users [X] [1] [v] [f] [≡]

Joined: 28 February 2020

Nikola Soc (nsoc) - Member [Change role] [X] Remove from group
Joined: 28 February 2020

Nina Krivokapic (nkrivokapic) - Member [Change role] [X] Remove from group
Joined: 28 February 2020

Tijana Micovic (tmicovic) - Member [Change role] [X] Remove from group
Joined: 12 March 2021

Vanja Kontic (vkontic) - Member [Change role] [X] Remove from group
Joined: 30 December 2020

Vasilije (Vasilije Vuckovic - vvuckovic) - Member [Change role] [X] Remove from group

e-VIVA Search users [X] [1] [v] [f] [≡]

Nikola Soc
Member of University of Montenegro
Montenegro [v] [Send invite]

About me

First name: Nikola
Last name: Soc

Nikola Soc's portfolios

Nikola Soc's groups

- eVIVA Students (Member)
- eVIVA Students University of Montenegro (Member)

Nikola Soc's friends

- Milan Brajovic
- Nikola Papan

2 friends

Nikola Soc's wall

MOODLE



Browser window showing the Moodle homepage. The address bar displays "moodle.eviva-learning.eu/?redirect=0". The page header includes the e-VIVA logo, a navigation menu, and the user name "Jelena Sakovic Jovanovic".

Left sidebar menu with the following items:

- Dashboard
- Site home
- Calendar
- Private files
- My courses
- eVIVA LP
- eVIVA Entrepreneurship Course Modules (Trainers)
- Intercultural Competence

Main content area showing a list of trainers:

- eVIVA Trainers (1)
 - eVIVA Entrepreneurship Course Modules (Trainers) (1)
 - Personal Competences (1)
 - Social Competences (2)
 - Organisational Competences (1)
 - Self Assessment of COL&V (1)
- European University of Tirana (2)
- Sarajevo School of Science and Technology (1)
- University Kadri Zeka Gjilan
- University of Elbasan "Aleksander Xhuvani" (5)
- University of Montenegro (8)
- University of Nis
- University of Novi Sad
- University of Sarajevo (7)
- Univerzitet Donja Gorica

Browser window showing the Moodle course page. The address bar displays "moodle.eviva-learning.eu/course/index.php?categoryid=13". The page header includes the e-VIVA logo, a navigation menu, and the user name "Jelena Sakovic Jovanovic".

Course categories: University of Montenegro

Search courses: Go

- Biznis planiranje, Canvas model-Business planning, Canvas model
- Upravljanje resursima, Ljudski resursi-Resource management, Human resources
- Liderstvo, Multikriterijumsko odlucivanje-Leadership, Multicriteria decision making
- Odnosi sa korisnicima, Customer relationship
- Kreativnost, timski rad-Creativity, teamwork
- Personal Competences copy 2
- Intercultural Competences copy 2

This Course will introduce to basic concepts of intercultural competences and how to develop those.

- Inovativnost i konkurentnost-Innovation and competitiveness

Add a new course

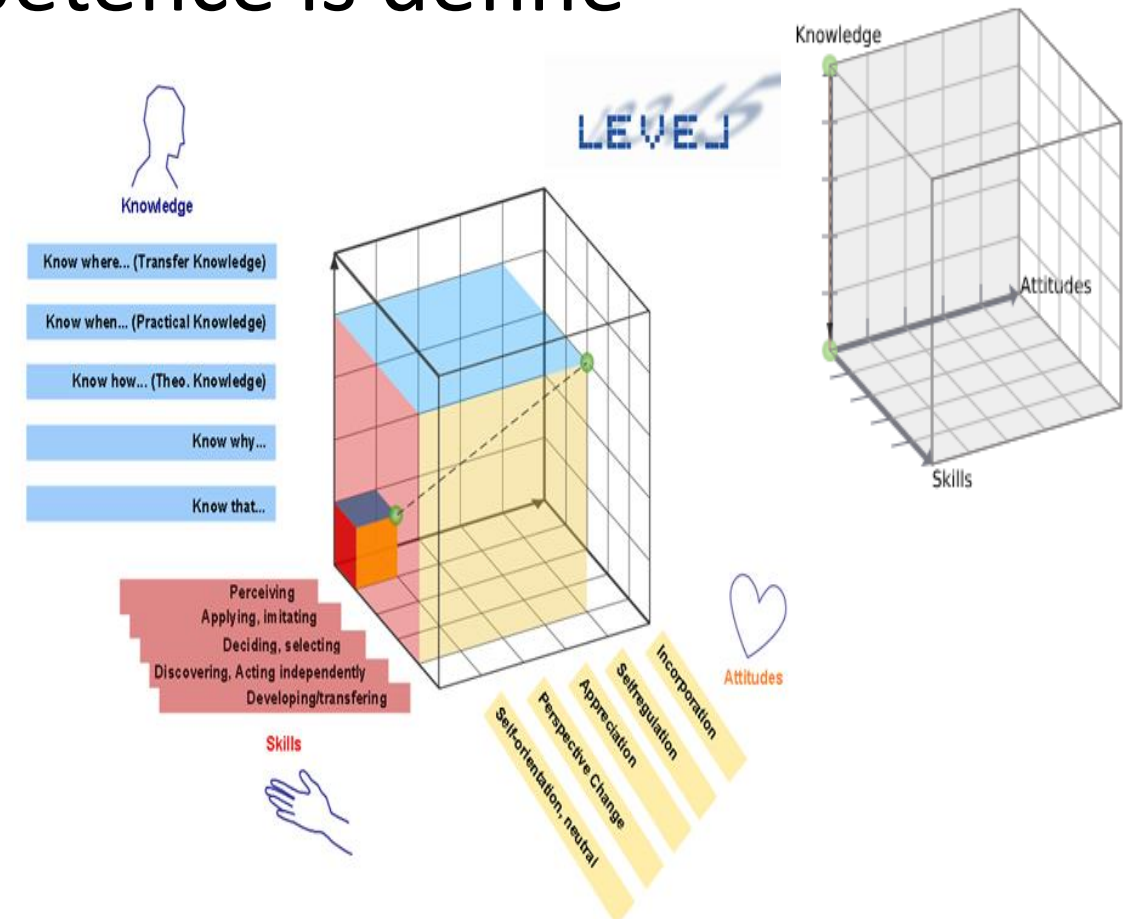
Level 5 – Validation of competences – SELF-EVALUATION

Level 5 – Validation of competences

LEVEL 5

According EVIVA project a competence is define as ability to apply a synthesis of

- Knowledge,
- Skills and
- Attitudes



SELF-EVALUATION

LEVEL 5

LEVEL	KNOWLEDGE	SKILLS Capabilities	ATTITUDES Emotions/Values
5	Know where else...	Transferring	Incorporation
4	Know when...	Discovering	Commitment
3	Know how...	Deciding	Appreciation
2	Know why...	Imitating	Perspective taking
1	Know-that...	Perceiving	

Knowledge		Skills		Attitudes	
Level Title	Level description	Level Title	Level description	Level Title	Level description
Know where else (knowledge for transfer)	Knowing how to transfer idea creation skills and concepts into other contexts. Knowing how to help other people act successfully in different entrepreneurial structures in this respect	Developing/ constructing/ transferring	Being able to transfer ideation and prototyping strategies into new business contexts. Actively planning and creating new entrepreneurial activities based on ideating and prototyping	Incorporation/ internalisation	Having internalised ideation and prototyping as a fundamental personal entrepreneurship mindset. Being an inspiration for others in their ideation and prototyping activities
Know when (implicit understanding)	Knowing when to apply right instruments from the portfolio of different ideation and prototyping approaches and tools. Knowing when to use certain ideation and prototyping strategies	Discovering/ acting independently	Deliberately searching for and selecting appropriate ideation and prototyping techniques and instruments for the own business. Creating and executing an ideation and prototyping strategy for the own context and professional domain	Self-regulation/ determination	Being determined and pro-active in using and improving ideation and prototyping in the own environment. Finding it important to be creative in this respect.
Know how	Knowing different ideation and prototyping approaches, techniques related to: <ul style="list-style-type: none"> • Spotting opportunities • Creating ideas • Working towards a Vision • Valuing ideas • Checking for Sustainability. Theoretically knowing how to act along an ideation and prototyping concept	Deciding/ selecting	Taking part in ideation and prototyping activities as they are offered by others in safe (undisturbed) contexts. Choosing singular ideation and prototyping tools from a given (known) portfolio	Motivation/ appreciation	Valuing ideation and prototyping in general. Being motivated to develop own ideation and prototyping competences and visions.
Know why (distant understanding)	Having basic knowledge on creativity and innovation. Knowing that idea creation, a multiperspective view on the ideas and the check of ideas is an essential part of the product/service and business development. Understanding basic aspects of the ideation and prototyping.	Using/ imitating	Occasionally taking part in non structured activities related to the creating of ideas. Carrying out ideating actions when being instructed to.	Perspective taking/interest	Being curious and interested in ideating and prototyping and spotting of opportunities.

25 certificates delivered to students

LEVEL 5

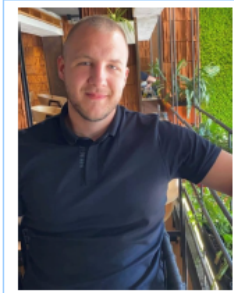
I generation



Learner-Certificate Eviva



Participant
Milan Brajovic



Informal learning project
Eviva

Project start	15/11/18
Project end	31/03/21
Institution	University of Montenegro
Location	Montenegro

Learning activities

The project consisted of intensive theoretical and practical training based on some case studies and simulation in real business environment and virtual business environment. The project was focused, mainly on learning, application and development: teamwork skills, communication skills, own business ideas developing, solving problems, customer satisfaction, employee satisfaction etc. Students worked in teams and strength their service related competences.

Evaluated competences

Spotting ideas and opportunities, Teamwork

Assessment methods

Combination of self- and expert assessment, aiming at self-reflection of what students have learnt (formative) but providing a rather high level of objectivity (external) and validity (based on both EntreComp and LEVEL5 taxonomy).

Assessors/Evaluators

Jelena Jovanovic

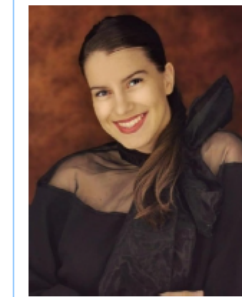
II generation



Learner-Certificate E-VIVA



Participant
Marija Ivanovic



Informal learning project
E-VIVA

Project start	15/11/18
Project end	15/11/21
Institution	University of Montenegro
Location	Montenegro

Learning activities

The project consisted of intensive theoretical and practical training based on some case studies and simulation in real business and virtual business environment. The project was focused, mainly on learning, application and development: teamwork skills, communication skills, own business ideas developing, solving problems, customer satisfaction, employee satisfaction etc. Students worked in teams and strength their service related competences especially competence related to communication.

Evaluated competences

Communication, Teamwork

Assessment methods

Combination of self- and expert assessment, aiming at self-reflection of what students have learnt (formative) but providing a rather high level of objectivity (external) and validity (based on both EntreComp and LEVEL5 taxonomy).

Assessors/Evaluators

Jelena Jovanovic



WP4 DEVELOPMENT

Projektom je predviđena **dvosedmična obuka 10 studenata** Univerziteta Crne Gore (uglavnom sa Mašinskog fakulteta) na **Univerzitetu u Skoplju** na temu razvoja socijalnih, personalnih i organizacionih kompetencija značajnih za rad u poslovnom okruženju. **!!!!!!**

Training in Skopje

- Sarajevo school of Science and Technology, BIH
- University Kadri Zeka Gjilan, Kosovo
- University of Nis, Srbija
- University of Montenegro, Montenegro

Po 10 studenata

WP6 Dissemination and Exploitation

Development of project visual identity and project promotional instruments

- **Project Website:** <https://evivaproject.eu/>
- **Social Media Networks:**
 - Facebook: [e-VIVA Project](#)
 - YouTube: [e-VIVA Project](#)
 - Twitter: [e-VIVA Project](#)
- **Newsletters & Leaflets:**
- <https://evivaproject.eu/project-newsletter/>





Erasmus plus projekti

Mašinski fakultet UCG uključen u tri programa

PODGORICA - Mašinski fakultet Univerziteta Crne Gore je partner na tri Erasmus plus projekta - REBUS, EVIVA i TRAFSAF, saopšteno je sa Univerziteta Crne Gore.

REBUS projekat je, kako pojašnjavaju, okupio impozantan konzorcijum od 14 univerzitetskih i korporacijskih timova iz osam zemalja, a cilj je razvoj preduzetničkih kompetencija kod studenata tehničkih studija u zemljama Zapadnog Balkana i Rusije.

- Projektom je u završnoj fazi uspostavljen i sistem za validaciju kompetencija što je rezultiralo mogućnošću izdavanja sertifikata o razvijenim preduzetničkim kompetencijama studentima koji su prošli sve faze treninga. U okviru ovog projekta obučene su dvije generacije studenata iz oblasti preduzetništva - saopštili su oni. Kroz EVIVA projekat će se, kako dodaju, razviti set inovativnih trening modula orjentisanih na razvoj društvenih, ličnih i socijalnih kompetencija koji će se u određenju mjeri integrisati u postojeće nastavne planove i programe.

- EVIVA projektom je predviđena i dvosredmična obuka 10 studenata Univerziteta Crne Gore (uglavnom sa Mašinskog fakulteta) na Univerzitetu u Skoplju na temu razvoja socijalnih, personalnih i organizacionih kompetencija značajnih za rad u poslovnom okruženju. Projekat će u završnoj fazi uspostaviti sistem za validaciju ovih kompetencija, koji će studentima omogućiti dobijanje sertifikata - saopšteno je sa UCG. TRAFSAF projekat koji je startovao krajem 2018. godine ima cilj, kako kažu, da identifikuje ključna pitanja u oblasti sigurnosti saobraćaja.

- Projekat se bavi: poboljšanjima kvaliteta visokog obrazovanja u oblasti transporta i saobraćaja; jačanjem relevantnosti za tržište rada i društvo; povećanjem nivoa kompetencija i vještina stručnjaka u zemljama Zapadnog Balkana (Srbija, Crna Gora, Kosovo, Bosna i Hercegovina) - istakli su oni.

N.Đ.

ENTRENOVA 12-14. September 2019

Rovinj, Croatia

The State of Service Related Competences in Montenegro

Jelena Šaković Jovanović,

University of Montenegro, Montenegro

Sanja Peković

University of Montenegro, Montenegro

Branko Bošković

University of Donja Gorica, Montenegro

Abstract

European business sector pays more increasing attention ever to competences, such as the sense of initiative and Service related skills. Social, Personal, and Organizational Competences are becoming competitive factors in the service economy, even though these competences are mainly being acquired in informal contexts. Still, there are no opportunities to acquire these competences at most universities. It was the main reason for conducting research and developing the Erasmus+ project E-VIVA project, with the aim to develop a learning approach for Service Related Competences in Higher Education. The University of Montenegro and the University of Donja Gorica are involved as partners on the E-VIVA project in the research of the state of the art of Service Related Competences in Montenegro. Accordingly, the two institutions performed joint research in the field through three instruments: desk research, online questionnaires, and an interview. Target groups for the research were: students, HEI, enterprises, administration, Chamber of Commerce. In this paper, the results of the research are presented, with a special focus on results obtained in online questionnaires. The main reason for that research is to evaluate a current state of

50 GODINA MAŠINSKOG FAKULTETA
UNIVERZITETA CRNE GORE: 1970–2020.

50 GODINA
1970–2020.
MONOGRAFIJA

Podgorica, 15. april 2020.

Najit
& izvrsnost

Jelena Šaković Jovanović, Branko Bošković,
Sanja Peković, Aleksandar Vujović

UDC 658.5:621(497.16)

RAZVOJ SERVISNO ORIJENTISANIH KOMPETENCIJA: CRNA GORA U FOKUSU

Servisno orijentisane kompetencije poput komunikativnosti, kreativnosti, kritičkog razmišljanja, timskog rada su od posebnog značaja za studente i njihovu konkurentnost na tržištu rada. Projekat Erasmus + E-VIVA je pokrenut sa ciljem da se na univerzitetima zemalja Zapadnog Balkana razvijaju moduli učenja koji razvijaju ove kompetencije kod studenata.

U radu je ukazano na značaj i efekte formalnog i neformalnog učenja i pristup E-VIVA projekta u razvoju servisno orijentisanih kompetencija kod studenata. Kako procjena efektivnosti obuke uvijek sa sobom nosi i dozu nepovjerenja u pouzdanost te ocjene, to je u projektu posebna pažnja posvećena upravo ovoj temi. S tim u vezi, u radu se prikazuje jedan vrlo efikasan i široko primjenjiv alat tzv. Level5, koji će se koristiti u ocjenjivanju kompetencija studenata a koji obezbjeđuje potreban nivo pouzdanosti ocjenjivanja. Alat je zasnovan na samooocjenjivanju, poput samooocjenjivanja efektivnosti i efikasnosti sistema menadžmenta shodno standardu ISO 9004.

1. UVOD

Orijentacija ka servisnoj ekonomiji zahtjeva prilagodavanje koje ide dalje od samo formalno usvojenih pravila, koja se odnose na promjene u sferi privrede. Jednako važni su i promjena percepcije i prakse, koje dominantno zavise od sistema obrazovanja, odnosno prilagodavanja i modernizacije obrazovnog sistema. U radu se govori o Erasmus+ projektu e-VIVA. kolt u Crnoj Gori srovođe Uni-

kompetencijama, dok četvrti dio prikazuje konkretne aktivnosti na projektu. U petom dijelu se govori o validaciji kao jednom od značajnijih segmenata projekta, koji prati zaključak kao posljednji dio.

2. KOMPETENCIJE I NJIHOV ZNAČAJ U SERVISNOJ EKONOMIJI

Kompetencije danas imaju posebnu važnost zato što omogućavaju kom-

postojanje znanja i vještine o mogućnosti da se uradi traženi zadatak i zato se radnja ponavlja kako bi se usavršila; nesvjesna kompetentnost podrazumijeva takvo stanje uma, ali i znanja i vještina, u kojem pojedinac može u svakom trenutku da uradi traženi zadatak, praktično automatski i u nebrojenim ponavljanjima, bez ulaganja dodatnog truda svaki put [1].

Kompetentnost se u skladu sa [3] može definisati kao sinteza sledećih elemenata:

- Znanje (kognitivno)
- Vještine (sposobnosti i ponašanje)
- Stavovi (emocije i vrijednosti)

Ovo je interna podjela kompetencija dok se sa eksternog aspekta, kompetencije mogu posmatrati kroz 3 elementa:

- Demonstriranje ponašanja
- U određenom kontekstu
- I sa odgovarajućim nivoom kvaliteta

Ovdje je riječ o tzv. "leptir mašini" modelu prikazanom na slici i [3].

Mugdim Pasic¹
Ketrina Čabiri Mijo
Branko Vucijak
Jelena Sakovic
Jovanovic
Marko Milojkovic
Belma Ramic-Brkic
Aleksandar Vujovic
Branko Boskovic
Altin Idrizi
Mirza Pasic
Ajdin Vatres
Dukagjin Leka

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DOI – 10.18421/IJQR~~XX.XX-XX~~

SERVICE RELATED COMPETENCES EDUCATION PRACTICES IN SOUTH EAST EUROPE

Abstract: This paper presents research on service related competences in South East Europe. This research was conducted as part of Erasmus+ CBHE project named Enhancing and validating service related competences in versatile learning environments in Western Balkan universities (e-Viva). Innovations and development of new technologies including automation of manufacturing processes cause paradigm shift in business models in manufacturing sector while service sector emerges as potential for economic growth by absorbing more labour and offering diverse services. Thus, development of service related competences is important factor for overall development of service sector. Stocktaking of service related competences in South East Europe aimed at the identification, analysis and description of current education programmes and practices relating to service orientation with focus on the interface between formal and informal learning in the higher education sector and possible connections to validation practices in relation to EQF, NQFs and the related instruments (ECTS, ECVET and EUROPASS).

Results of desk research, analysis of results of the online questionnaire results and interviews with stakeholders (one-to-one or focus group) as well as interpretation of needs analysis in South East Europe are presented in this paper.

Keywords: Service, Competences, Education, Validation, Entrepreneurship



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www.ijqr.ijqr@kg.ac.rs



Certificate

Awarded July, 2021 to

Mugdim Pasic, Ketrina Čabiri Mijo, Branko Vucijak, Jelena Sakovic Jovanovic,
Marko Milojkovic, Belma Ramic-Brkic, Aleksandar Vujovic,
Branko Boskovic, Altin Idrizi, Mirza Pasic, Ajdin Vatres, Dukagjin Leka

in recognition of the publication of manuscript
SERVICE RELATED COMPETENCES EDUCATION PRACTICES IN SOUTH EAST EUROPE
Manuscript will be published in
International Journal for Quality Research v16, n2, Doi10.24874/IJQR16.02-12



Miladin Stefanovic
Executive Editor



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Hvala na pažnji!
