



Trained persons responsible for  
preparation of OER content

DEV 3.4



**BAEKTEL**

Blending academic and entrepreneurial knowledge  
in technology enhanced learning

*Blending **Academic** and **Entrepreneurial** Knowledge  
in Technology enhanced learning – BAEKTEL*

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**BAEKTEL**

Project full title:

**Blending Academic and Entrepreneurial Knowledge  
in Technology Enhanced Learning**

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**DEV 3.4**

**Trained persons responsible for preparation of OER  
content**

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**University of Belgrade (UB)**

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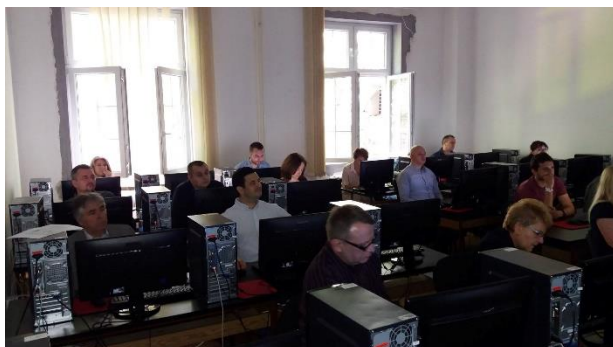
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## 1 Trainings WB

### 1.1 Workshop regional Meeting Belgrade 12-13 May 2016



The meeting was organized as a two days workshop with regional partners from WB. It took place at University of Belgrade - Faculty of Mining and Geology, Đušina 7, 11000 Belgrade, Serbia, 1st floor, room 152. Apart from WB partners, colleagues from TEMPUS CaSa project Vesna Poleksić and Milevica Bojović were present and they took active part in the workshop. The first day of the meeting was dedicated to WP4 activities. Danijela Milošević from UNIKG gave an overview on performed peer to peer (internal) evaluation of BAEKTEL edX courses.

Saša Tatar from UBL argued that courses that are placed on the edX platform have to be complete and obligatory have the form of the course with: video material and quizzes (knowledge tests) and that the entire material should be prepared in edX format, not uploaded as .pdf, .ppt,... It was also proposed that all YouTube content video be published under a CC license, rather than the standard YouTube license. It was agreed that each institution should create a representative learner group whose members will be students and junior employees.

The results of survey questionnaire will offer information about the quality of published

Sastanak je organizovan kao dvodnevna radionica sa regionalnim partnerima iz WB. Održana je na - Rudarsko-geološkom fakultetu Univerziteta u Beogradu, Đušina 7, 11000 Beograd, Srbija, 1. sprat, soba 152. Pored partnera iz zapadnog Balkana, bile su prisutne kolegice iz Tempus CaSa Projekta Vesna Poleksić i Milevica Bojović i one su aktivno učestvovala u radionici. Prvi dan sastanka je bio posvećen WP4 aktivnosti. Danijela Milošević iz UNIKG dala pregled o izvršenoj peer to peer (unutrašnjoj) evaluaciji BAEKTEL Edx kurseva.

Saša Tatar sa UBL tvrdio je da predmeti koji se postavljaju na edX platformu moraju biti potpuni i obavezno imati oblik kursa sa video materijalom, kvizovima (testovima znanja) i da ceo materijal treba da bude pripremljen u edX formatu, a ne postavljen kao .pdf, .ppt,... Takođe je predloženo da se YouTube video sadržaj objavi pod CC licencom, a ne standardnom YouTube licencom. Dogovoreno je da svaka institucija formira reprezentativnu grupu polaznika čiji će članovi biti studenti i mlađi zaposleni.

Rezultati anketnog upitnika ponudiće informacije o kvalitetu objavljenih materijala i ukupan utisak i iskustva polaznika stečena pohađanjem ove vrste kurseva. Nekoliko pitanja

materials and the overall impression and experiences students got from attending this type of courses. Several questions were raised, such as: Did the course attract enough learners? Were they sufficiently qualified? Did most of them complete the course? Why did learners drop out or failed to complete the course? Were the standards sufficiently high? Was the course cost-effective? Were the learners satisfied? Were other stakeholders satisfied? What needs to be changed?

Nenad Stefanović, from UNIKG presented a proposal for mutual agreement on OER minimal structure (according to type), content and metadata description. He gave an example of how to set the CC license. Marija Blagojević from UNIKG presented a proposed template for verification of OER evaluation. This template is related to external evaluation and partners concluded that the proposed template should be revised. This template should recognize different types of OER and allow teachers to choose specific questions they need for evaluation. Examples of internal evaluation were shown and during discussion it was concluded that the proposed form is applicable for conducting internal evaluation.

The second day of meeting was dedicated to Dev 3.3. Ranka Stanković gave an introduction into state of the art of the Dev 3.3 "Multilingual terminological resources and services used for supporting OER multilinguality". After a short introduction she gave the language support system overview. The multilingual resources were explained through the computer-lexicographical process for online dictionaries, terminological standards TBX and TMX, as well as related guidelines.

A brief overview of translation tools was presented with OmegaT, MemoQ and SDL Trados. Presentation of services for multilingual support included Termi application demonstration (available at <http://termi.rgf.bg.ac.rs/>). Marija Radojičić from

je pokrenuto, kao što su: Da li je kurs privukao dovoljno polaznika? Da li su dovoljno kvalifikovani? Da li je većina njih završila kurs? Zašto polaznici napuštaju ili ne završe kurs? Da li su standardi dovoljno visoki? Da li je kurs isplativ? Da li su učenici zadovoljni? Da li su ostali akteri zadovoljni? Šta treba da se promeni?

Nenad Stefanović, sa UNIKG dao je predlog sporazuma o minimalnoj strukturi OER-a (u zavisnosti od vrste), sadržaja i opisa metapodataka. Naveo je primer kako da se podesi CC licenca. Marija Blagojević sa UNIKG predstavila je obrazac predloga za verifikaciju ocenjivanja OERa. Ovaj obrazac se odnosi na eksterne evaluacije i partneri su zaključili da predloženi šablon treba revidirati. Ovaj obrazac bi trebalo da prepozna različite vrste OER i omogući nastavnicima da izaberu konkretna pitanja koja su im potrebna za evaluaciju. Primeri interne evaluacije su prikazani i tokom rasprave je zaključeno da se predloženi oblik može primeniti za obavljanje interne evaluacije.

Drugi dan sastanka je bio posvećen Dev 3.3. Ranka Stanković je dala uvod u trenutno stanje Dev 3.3 "Višejezični terminološki resursi i usluge koje se koriste za podršku višejezičnosti OER ". Nakon kratkog uvoda dala je pregled sistema za jezičku podršku. Višejezički resursi su objašnjeni kroz računarsko-leksikografsku proceduru za online rečnike, terminološke standarde TBX i TMX, kao i odgovarajuće smernice.

Kratak pregled alata za prevođenje je prezentovan sa OmegaT, MemoQ i SDL Trados. Prezentacija usluga za podršku višejezičnosti obuhvatila je i demonstraciju Termi aplikacije (dostupna na <http://termi.rgf.bg.ac.rs/>). Marija Radojičić sa UB je rukovodila sesijom obuke za korišćenje Termi aplikacije. Demonstrirala je unos podataka u aplikaciju i svi učesnici sastanka aktivno su se pridružili sesiji za unos podataka.

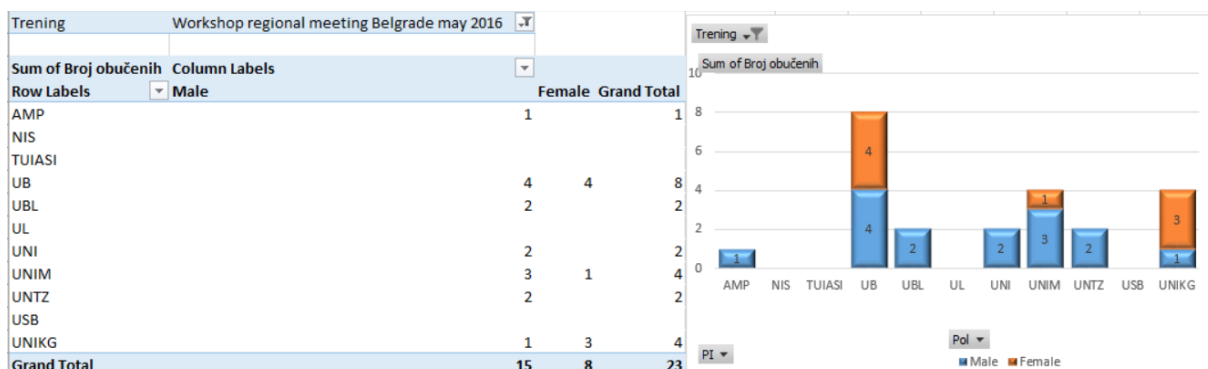
UB conducted a training session for using Termi application. Data entry into the application was demonstrated and all meeting participant actively joined the data entry session.

Before the meeting, each partner had prepared at least 20 term entries with definitions and 5 bibliography units, in order to speed up data entry during workshop session. Possibility of terminology integration within OERs of different type was demonstrated.

Entry of data to Termi application should be continued in the next period and, generally speaking, these data should be from the same domain as OER (per partner). A full description of term contains: the term and its definition in Serbian and in English, as well as the bibliographic reference from which the term definition was taken. Joint work did not result in any suggestions for Termi application improvement. It was agreed that the next regional workshop meeting will be held in Banja Luka. At the end of meeting, Ivan Obradović summarized the main points of the meeting, outlining a to-do-list with clear identifications of main milestones and checkpoints for the future. It was concluded that the CaSa project can have also benefits from using Termi application and a working and inter-project coaching meeting was scheduled for the beginning of June

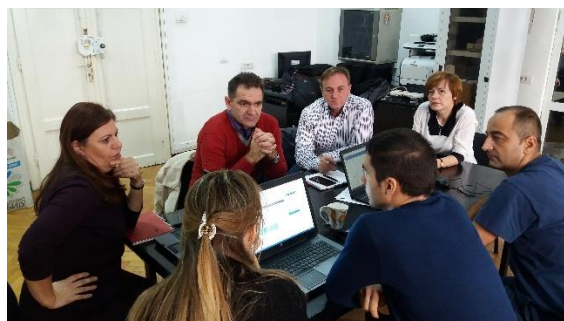
Pre sastanka, svaki partner je pripremio najmanje 20 termina sa definicijama i 5 bibliografskih jedinica, kako bi se ubrzao unos podataka tokom radionice. Demonstrirane su mogućnosti integracije terminologije u različite vrste OERova.

Unos podataka u Termi aplikaciju treba da se nastavi u narednom periodu i, uopšteno govoreći, podaci bi trebalo da budu iz iste oblasti kao OER (po partneru). Pun opis termina sadrži: naziv i definiciju na srpskom i na engleskom jeziku, kao bibliografsku referencu sa koje je definicija termina uzeta. Zajednički rad nije doveo do bilo kakve sugestije za poboljšanje Termi aplikacije. Dogovoreno je da će sledeća regionalna radionica biti održana u Banjaluci. Na kraju sastanka, Ivan Obradović je rezimirao glavne zaključke sastanka, ističući listu obaveza sa jasnim identifikovanjem glavnih etapa i kontrolnih tačaka u budućnosti. Zaključeno je da projekat CaSa može imati koristi od upotrebe Termi aplikacije i radni među-projekttni sastanak zakazan je za početak juna.



Training statistic

## 1.2 Internal QA with technical meeting Belgrade 22-25 November 2016



Ranka Stanković presented guidelines to be used when creating terminological resources, and has indicated that standards must be met so that terms could be used without problems in published OER, in order to ensure quality of OER terminology.

The team members from UNTZ discussed about entering mining and environmental terminology, which is of special interest, as it is to be used in the majority of published OER materials related to mining industry. Ranka Stanković and Dalibor Vorkapić presented a Termi application tutorial. Some BESTSDI project features were discussed, on which BAEKTEL could rely in terms of sustainability.

Attention was given to computer science terminology, which appears in almost all OER courses created by the participants of partner institutions. Team members from UB presented translation tools that can be used to assist when generating terminological resources in order to realize multilingualism of OER.

Further work was related to the integration of terminology with OER, which is one of the important activities within Dev3.4. At the end, the main points of the meeting were summarized, a to-do-list was created and presented, with clear identification of main milestones and check-points for the future,

Ranka Stanković je predstavila smernice koje će se koristiti prilikom kreiranja terminoloških resursa i ukazala je da moraju biti ispunjeni standardi tako da se termini mogu koristiti bez problema u objavljenom OER-u, kako bi se osigurao kvalitet OER terminologije.

Članovi tima UNTZ diskutovali su o unosima termina za rudarstvo i životnu sredinu, koji je od posebnog interesa, jer se koriste u većini objavljenih OER materijala koji se odnose na rudarsku industriju. Ranka Stanković i Dalibor Vorkapić su predstavili tutorijal za TERMI aplikaciju. Razgovarano je na temu nekih funkcije BESTSDI projekta, na koji BAEKTEL može da se osloni u pogledu održivosti.

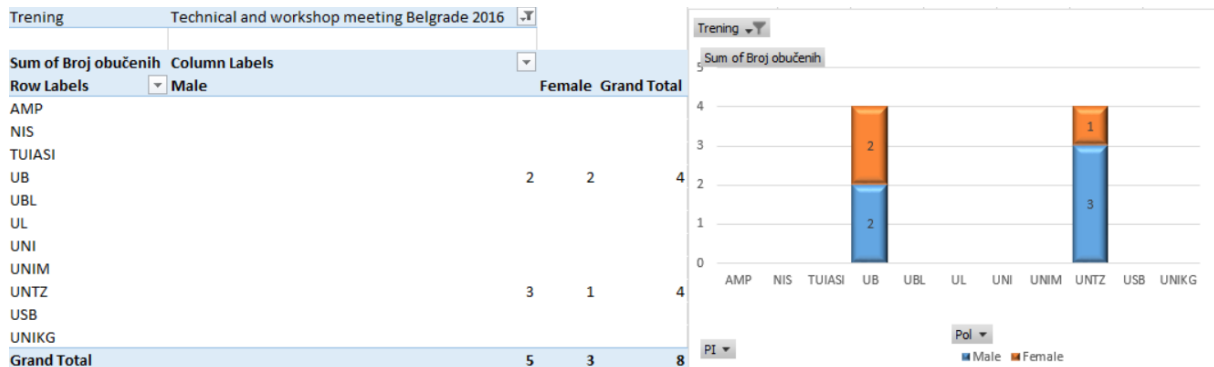
Pažnja je posvećena računarskoj terminologiji, koja se pojavljuje u gotovo svim OER kursevima kreiranim od strane učesnika partnerskih institucija. Članovi tima iz UB predstavili su alate za prevođenje koji se mogu koristiti za pomoć prilikom generisanja terminoloških resursa kako bi se realizovala višejezičnost OER-ova.

Dalji rad bio je vezan za integraciju terminologije sa OER-om koja je jedna od važnih aktivnosti u okviru Dev3.4. Na kraju su rezimirani glavni zaključci postignuti na sastanku. Kreirana je i predstavljena lista planiranih aktivnosti sa jasno preciziranim glavnim etapama i kontrolnim stanjima za



especially for Internal quality assurance report.

budućnost, posebno za Interni izveštaj osiguranja kvaliteta.



Training statistic

## 2 Trainings EU

### 2.1 Training meeting Bari 11-12 June 2015



The Training meeting in Bari has been a two days meeting centred on knowledge and learning from the perspective of the labour market players (i.e. companies). This is a particular and very important perspective for the BAEKTEL project. The BAEKTEL platform will be effective and sustainable only if the project team understands the needs and expectations of the companies, and addresses tailored solutions in the development of the platform and in the production of OER.

Trening sastanak u Bariju je trajao dva dana na temu znanja i učenja iz perspektive tržišta rada (tj. kompanija). To je specifičan aspekt koji je posebno zanimljiv i važan za BAEKTEL projekat. BAEKTEL platforma će biti efektivna i održiva samo ako projektni tim razume potrebe i očekivanja kompanija i pri kreiranju platforme i otvorenih materijala se posveti rešenjima posebno prilagođenim ovim potrebama i očekivanjima.

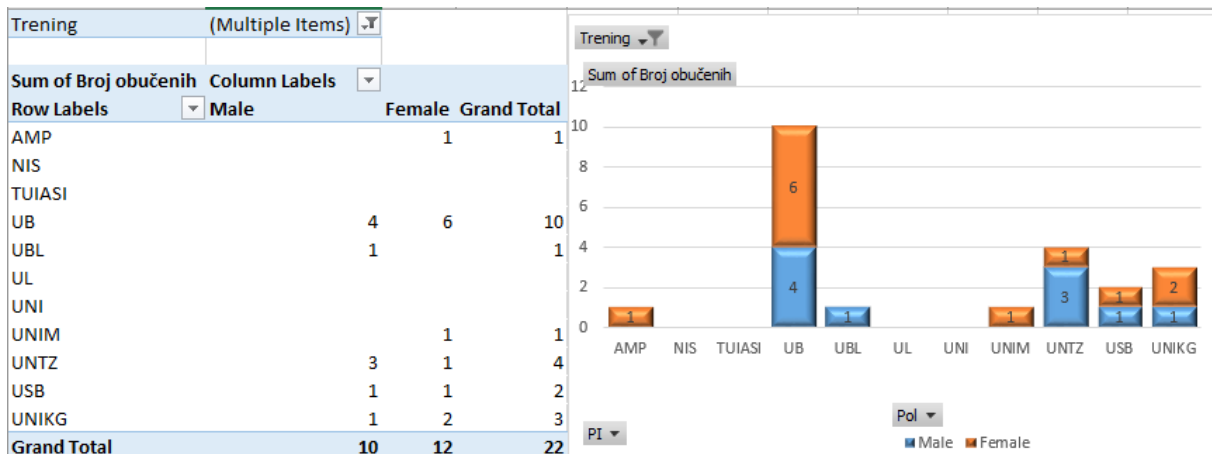
U toku prvog dana održane su 3 sesije obuke: Kolektivni inteligentni sistemi za

During the first day 3 training sessions have been administered: Collective Intelligence Systems for Technology Entrepreneurship, Creativity and innovative mindset for entrepreneurship: enabling factors, processes and environment, Culture, Innovation and Entrepreneurship in tertiary higher education: connecting the knowledge dots.

During the second day, more diversified and shorter presentations from different trainers have been delivered within 2 sessions: Crossing the language and cultural barriers - Innovative approaches to blending academic and entrepreneurial knowledge and Innovation in Higher Education and Competence Development, through e-Learning.

tehnološko preduzetništvo, Kreativnost i inovacije za preduzetništvo: omogućujući faktori, procesi i okruženje, Kultura inovacije i preduzetništvo u terciarnom visokom obrazovanju – povezivanje tačaka znanja.

U toku drugog dana nešto raznovrsnije i kraće prezentacije različitih trenera date su kroz dve sesije: Premošćavanje jezičkih i kulturoloških barijera – Inovativni pristupi u spajanju akademskog i preduzetničkog znanja, i Inovacije u visokom obrazovanju i razvoj kompetencija kroz e-učenje.



Training statistic

## 2.2 Training meeting Ljubljana 10-11 November 2016



Dr. Roberto Linzalone presented the current state and progress of the BAEKTEL project. Travelling costs were discussed in detail. The partners acknowledged the need of making a projection of expenses until the end of the project. This will allow to verify if any of the budget will not be spent, and explore the feasibility of transferring this 'unspent budget' among partners.

Each partner should check whether staff costs are in line with their regular daily rate, for the position they cover, in their Institution.

Dr. Linzalone focused on "External quality assurance" meetings. They have not been carried out yet. Dr. Ivan Obradović suggested that the external quality assurance of OER materials by EU partners could be performed off-line using some sort of questionnaires, rather than meeting face-to-face.

Finally, the partners agreed with him on the advantages of delivering this activity via internet and in back-office

Regarding the final Financial Statement (FS), partners' administrative persons will receive the template, which should be filled out and then sent back to USB.

It was agreed that all partners have to upload their financial statements by the end of the

Roberto Lincalone predstavio je trenutno stanje i napredak BAEKTEL projekta. Detaljno se raspravljalo o putnim troškovima. Partneri su potvrdili potrebu da se izradi projekcija troškova do kraja projekta. To će omogućiti da se provjeri da li neki deo budžeta neće biti potrošen i istraži izvodljivost prenošenja neutrošenog budžeta među partnerima.

Svaki partner treba da provjeri da li su troškovi za učesnike u skladu sa njihovim redovnom dnevnim primanjima za poziciju koju pokrivaju u svojoj instituciji.

Dr Lincalone se posebno osvrnuo na sastanke za „Eksterno osiguranje kvaliteta“. Oni još nisu održani. Dr Ivan Obradović je predložio da se eksterno osiguranje kvaliteta OER materija od strane partnera EU obavi offline koristeći neku vrstu upitnika, a ne kroz neposredne sastanke.

Konačno, partneri su se složili sa njim o prednostima obavljanja ove aktivnosti putem interneta.

Što se tiče završnog finansijskog izveštaja, administrativna lica partnera će dobiti obrazac koji bi trebalo popuniti i poslati nazad na USB.

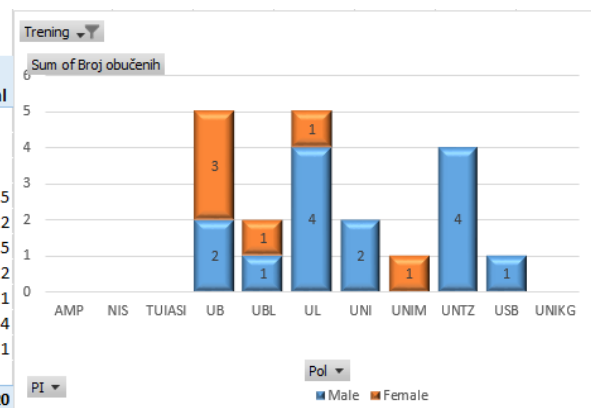
year, 31.12.2016. and then continue to update and transfer it periodically. The Final Report (FR) will be written the same way as the intermediate report.

On the second day of the meeting a workshop entitled “Presentation skills in English” was held.

Dogovoreno je da svi partneri moraju da postave svoje finansijske izveštaje do kraja godine, 31.12.2016. a zatim nastaviti da ažuriraju i dostavljaju povremeno. Konačni izveštaj biće napisan na isti način kao i među-izveštaj.

Drugog dana sastanka održana je radionica pod nazivom „Veštine prezentacije na engleskom jeziku“.

Sum of Broj obučениh	Column Labels	Male	Female	Grand Total
AMP				
NIS				
TUIASI				
UB		2	3	5
UBL		1	1	2
UL		4	1	5
UNI		2		2
UNIM			1	1
UNTZ		4		4
USB		1		1
UNIKG				
<b>Grand Total</b>		<b>14</b>	<b>6</b>	<b>20</b>



Training statistic

### 2.3 Training meeting, Iasi, February 8-9, 2017



A training and working meeting took place at the “Gheorghe Asachi” Technical University of Iași (TUIASI), Romania (February 8-9, 2017).

The first presentation was “Academic eLearning – A new way to understand user expectations”, by Costi Andriescu. Advantages and disadvantages of eLearning

Obuka i radni sastanak održani su na "Gheorghe Asachi" Technical University of Iași (TUIASI), Rumunija (februar 8-9 2017).

Prva prezentacija bila je "Akademsko e-učenje - Novi način da se razumeju očekivanja korisnika", predavač je bio Costi Andriescu. Prikazane su prednosti i mane eLearning sistema, sa očekivanjima

system were presented, with expectations of the universities (professors and students) and software solutions.

Assistant dr. Adrian Alexandrescu presented "Teaching students using the Moodle learning platform".

Moodle is an online learning management system where teachers can manage their own courses and students have a single access point to all the courses and other related activities. The following were emphasized: features, installation, use, interface; an interactive demonstration was also given.

The next two presentations were based on linguistic theory: "Dictionary Entry Parsing Using Segmentation-Cohesion-Dependency", by Associate professor Alex Moruz and "Segmentation-Cohesion-Dependency Parsing Strategy", by Associate professor Diana Trandabat.

Then, two other presentations applying eLearning in engineering education, particularly for textile engineering field followed: "Open source software solution for eLearning used in textile engineering education", presenter: Lecturer dr. Adrian Buhu and "E-learning tools for textile engineering field", Presenter: Professor dr. Mirela Blaga. eXe Learning software (eLearning xHTML editor) was also described and exemplified.

The last presentation, "Software multifunctional platform for Open Educational Resources" was a PowerPoint with auto-self run, slides and voice, containing an interesting educational software product developed by Romus Trading Company.

The second day of the event, which was a working day, focused on discussions related to the financial aspects of the project which is in the final stage. The discussion was

univerziteta (profesora i studenata) i softverska rešenja.

Asistent dr. Adrian Alexandrescu je predstavio "Osposobljavanje studenata pomoću Moodle platforme za učenje".

Moodle je online sistem za upravljanje učenjem, gde nastavnici mogu upravljati vlastitim kursevima i učenici imaju jednu pristupnu tačku na sve kurseve i druge srodne aktivnosti. Istaknuto je sledeće: karakteristike, instalacije, upotreba, interfejs; data je i interaktivna demonstracija.

Naredne dve prezentacije bazirane su na lingvističkoj teoriji, "Parsiranje rečničkih odrednica koristeći segmentaciju-koheziju zavisnost", vanrednog profesor Aleksa Moruza i "Segmentacija-kohezija-zavisnost strategije parsiranja", vanrednog profesora Diane Trandabat.

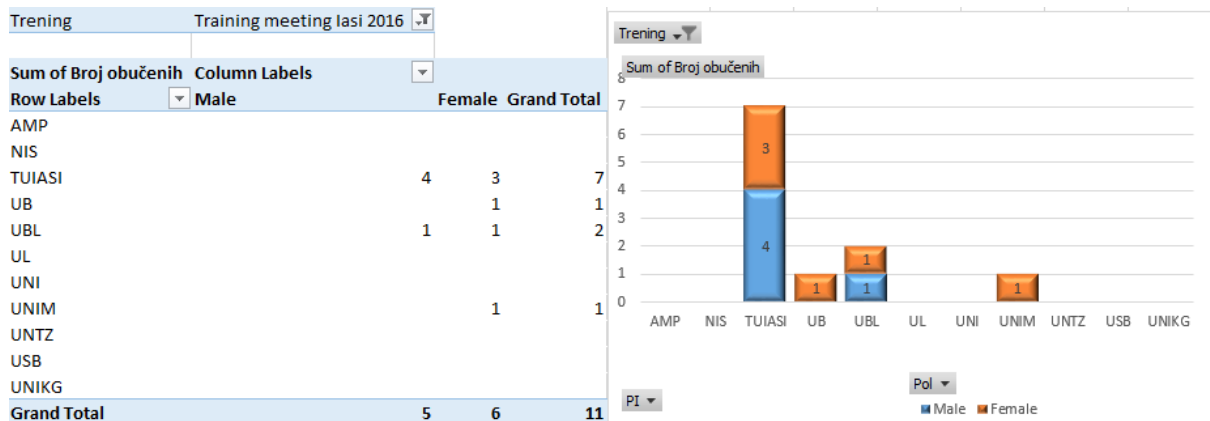
Zatim su sledile još dve prezentacije primene e-učenja u inženjerskom obrazovanju, a posebno i polje tekstilnog inženjerstva: "Softversko rešenje otvorenog koda za e-učenje koje se koristi u obrazovanju tekstilnog inženjerstva", koju je predstavio Predavač dr. Adrian Buhu i "Alati za e-učenje u oblasti tekstilnog inženjerstva", koju je predstavila profesor dr. Mirela Blaga. eXe softver za učenje (eLearning xHTML editor) je opisan i objašnjen.

Poslednja prezentacija, „Multifunkcionalna softverska platforma za otvorene obrazovne resurse" je bila PowerPoint prezentacija, sa automatskim pokretanjem, slajdovi i glas, koja je sadržala zanimljiv obrazovni softverski proizvod koji je razvila Romus Trading Company.

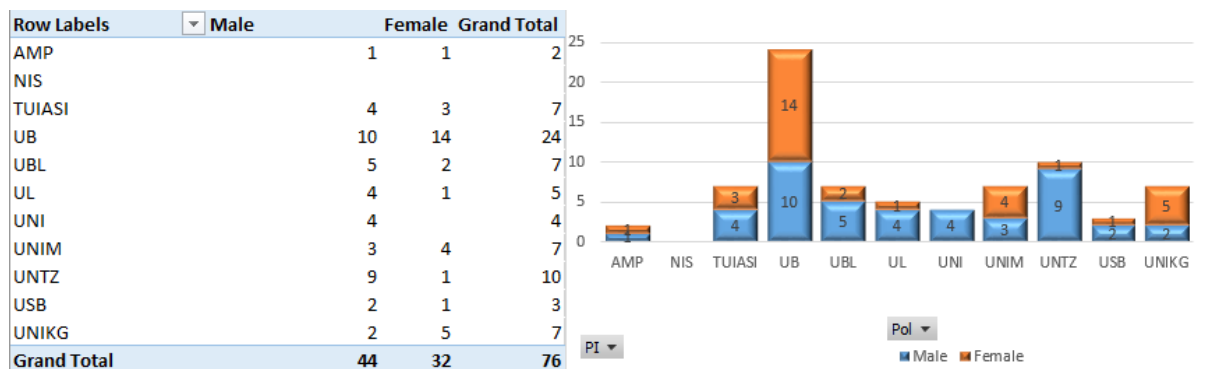
Drugi dan događanja, koji je bio radni dan, fokusiran je na rasprave koje se odnose na finansijske aspekte projekta koji je u završnoj fazi. Raspraviuje vodio profesor Roberto

conducted by professor Roberto Linzalone. Estimative financial situation can be made, collecting the financial statements from all partners. Other aspects approached: quality report, final report of the project, external evaluation.

Linzalone. Može se napraviti procena finansijske situacije, prikupiti finansijski izveštaji od svih partnera. Razmotreni su i drugi aspekti: izveštaj o kvalitetu, završni izveštaj projekta, eksterna evaluacija.



Training statistic



Summary trainings statistic

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